

Refuges and Wildlife

Fiscal Year 1999 Annual Report Region 3



*A Service biologist inspects
a duck nest on
Muscatatuck NWR
-USFWS Photo*

Program Description and Mission

The Refuges and Wildlife Program is responsible for the acquisition and management of lands within the National Wildlife Refuge System for the purpose of assuring the perpetuation of wildlife populations for the American public. Additionally, work is done with private landowners and organizations to enhance wildlife populations on private lands. The Regional Migratory Bird program is responsible for migratory bird management coordination and permitting activities and is part of the overall Refuges and Wildlife Program. The North American Waterfowl Management Plan staff seeks to protect, restore, and enhance wetland and grassland habitats essential to the achievement of the Plan's goals.



*The blue goose, designed by J.N.
"Ding" Darling, has become the
symbol of the National Wildlife
Refuge System*

Summary of Fiscal Year 1999 Accomplishments

Refuge Operations

During Fiscal Year 1999, the Refuge Operational Needs (RONS) database was reviewed and revised by the Division of Refuge Operations with more complete and accurate information. The projects were ranked and submitted to Washington, D.C.

The Regional weed survey was completed and submitted to Washington, D.C. The database was revised to capture weeds that are classified as invasive species for next year's survey.

Field station evaluations were reinstated with a total of five stations receiving evaluations this year.

The Region processed 48 Pesticide Use Proposals this year. Four were not approved and nine were sent to Washington, D.C. for approval.

With the assistance of the Bureau of Indian Affairs, the Region submitted a proposal to locate the Eastern Area Coordination Center (EACC) in the Whipple Federal Building at Ft. Snelling. The Center, which coordinates interagency emergency response (primarily wildfire suppression) between Federal agencies and the twenty Northeastern and Upper Midwestern States, is currently split between two locations, at Radnor PA and Milwaukee, WI. Under national interagency fire policy, all Coordination Centers must be merged and located at one site. The FWS/BIA proposed site, one of eight submitted, was chosen the preferred site by the Eastern Area Coordination Group Selection Committee. Merging and opening of the Center at the new Ft. Snelling location is expected to be completed November 3, 1999.

A Region 3 training forum entitled "Biology and the Ecosystem Approach: Putting the Pieces Together" was held in St. Louis, MO, during the week of February 12-16, 1999. Over 200 biologists attended. A report titled "Advancing Biology to the 21st Century: Issues and Recommendations to Improve Region 3's Biological Program" was completed and submitted to the Regional Management Team.



*Prescribed burn on Region 3
Waterfowl Production Area*
-USFWS Photo

Realty In the Waterfowl Production Program in Iowa, Minnesota, and Wisconsin, the Division of Realty completed 78 transactions, protecting 4,241 acres in fee, 3,054 acres of wetland easements, and 765 acres of grassland easements at a total cost of \$4,910,113. An additional two tracts, covering 161 acres were acquired with a value of \$79,039, using Migratory Bird funds. In addition, three tracts, covering 95 acres (10 wet) at a total cost of \$81,075 were acquired using North American Wetland Conservation Act (NAWCA) funds. A total of 1,387 acres, with \$3,902,754 of Land and Water Conservation Fund (LWCF) monies in five transactions at four projects were completed. An additional 272 acres were acquired with \$186,100 in three projects using flood monies. An additional 228 acres were acquired with \$402,780 in NRDA funds at Crab Orchard NWR.

In Fiscal Year 1999, the National Environmental Policy Act (NEPA) compliance work and decision documents were completed for the expansion of the Big Muddy NF&WR and the establishment of the Grand Kankakee Marsh NWR. Planning to establish two new refuges, the Aldo Leopold NWR in Wisconsin and the Little Darby NWR in Ohio, began or continued during the year. Comprehensive Conservation Plans were begun or continued on 11 refuges and several will soon be available in draft form. The Region 3 Planning Internet website was greatly expanded and now includes on-line copies of decision documents and regular project updates.

Private Lands The Partners for Fish and Wildlife (PFW) program continued in its efforts to restore habitats for trust species. Over 800 wetland sites totaling more than 4,600 acres were restored throughout the Region. Native prairie was reestablished on 145 sites totaling 3,600 acres. An infusion of Clean Water Action Plan and Fisheries Habitat Restoration monies resulted in 8 miles of riparian and in stream restoration work with an additional 25 miles that have been started and will be completed in Fiscal Year 2000. PFW also provided habitat restoration assistance on 10,500 acres of property slated for permanent protection under USDA's Wetlands Reserve Program.

PFW worked with over 350 private landowners in Fiscal Year 1999. Additionally, over 90 formal partnerships were entered into with local and state units of government and NGOs. More than 125 partners contributed a total of \$2 million dollars toward the efforts of habitat restoration for trust resources in partnership with the Partners for Fish and Wildlife Program in the Region.

Visitor Information and Management

Interpretive exhibits were fabricated and installed at Big Stone, LaCrosse, and Rice Lake NWRs; visitor center planning assistance continued for the Mississippi River Discovery Center, and the Riverlands Visitor Center. Newly designed full color brochures were printed for seven refuges.

In Fiscal Year 1999, over 4,550 individuals volunteered 182,000 hours of work on 61 field stations. Twenty one refuges in the Region currently are benefitting from the efforts of organized citizen support groups. Three new groups are in the early stages of organizing and incorporating, and they were especially benefitted from mentoring visits from seasoned "Friends experts."

Public use of National Wildlife Refuges in Region 3 totaled 7.5 million visitors in Fiscal Year 1999. This total included 3.6 million visits for wildlife observation and interpretation, 600,000 hunter visits, and 1.2 million visits by anglers. In addition, 130,000 students participated in staff or volunteer conducted environmental education programs on refuges, and 2,464 teachers took part in educational workshops on refuges.



*Wildlife observation deck at
Mingo NWR, Puxico, Missouri*
-USFWS Photo

North American Waterfowl Management Plan

The Implementation Plan for the Upper Mississippi River Joint Venture (UMRJV) was updated and broadened to include waterfowl breeding and mid-migration objectives, and a nongame bird objective.

Partners began the process of mapping all existing grassland habitats within the Prairie Pothole Joint Venture areas of Region 3. Once completed, this information will be compiled to create a GIS layer which will be used in the planning of habitat conservation strategies for both waterfowl and nongame grassland birds.

Partners associated with the PPJV and the UMRJV received 12 North American Wetlands Conservation grants totaling \$5.8 million dollars in Fiscal Year 1999. These federal dollars were matched by non federal contributions totaling over \$20.7 million dollars. Combined these contributions were directed toward the protection, restoration, and enhancement of wetland and grassland habitats in priority regions of the Joint Ventures. Collectively these dollars resulted in the protection of over 23,300 acres, the restoration of 13,000 acres, and the enhancement of over 12,700 acres of wetland and grassland habitats.

Through the challenge cost-share program, regional North American dollars, totaling over \$175k, were provided to 14 field stations and/or NGO partners for habitat restoration on public or private lands. These dollars were matched by non federal contributions totaling over \$260K.

Additional partner wetland/grassland accomplishments, not involving NAWCA grants, included over 6,000 acres protected, 4,500 restored, and 3,500 acres enhanced.

New partnerships have been established with native American Indian tribes (Bad River Band of Lake Superior Chippewa, Keweenaw Bay Indian Community), and local land trusts (Grand Traverse Regional Land Conservancy, Southeast Michigan Land Conservancy). These partnerships will focus on the protection and restoration of wetland and grassland habitats.

Migratory Birds



Biologist Eric Nelson inspects a mallard duck egg on the Winona District of the Upper Mississippi River NW & FR
-USFWS Photo

The Division of Migratory Birds actively participated with the North American Waterfowl Management Plan Joint Venture staff to complete a draft of the shorebird plan for the Upper Mississippi/Great Lakes Region, which is a component of the U. S. Shorebird Conservation Plan, to be published in 2000. A major BRD study was supported to validate the Grassland Bird Conservation Area model developed by Partners in Flight.

The Migratory Bird program provided \$300,000 for 82 nongame bird monitoring, research, management, and education projects, including 47 done on national wildlife refuges. Funding was also provided for research and management projects relating to Canada geese, duck nesting habitat, woodcock, ingestion of spent shot pellets by ducks in the Mississippi Flyway, tundra swans, shorebirds at Hudson Bay, and for wetland management. At the national level, Region 3 Migratory Birds staff played a major role in addressing the management of double-crested cormorants and developing standardized monitoring protocols for marsh birds.

Major support was provided by Migratory Birds for a three-year colonial waterbird survey throughout the Great Lakes. Migratory Birds conducted the "ground" portion of the annual breeding waterfowl survey in Minnesota, and coordination was furnished for the Woodcock Singing Grounds Survey, the Mourning Dove Call Count Survey, and the mid-winter waterfowl survey. The Habitat and Population Evaluation Team produced duck breeding population and production estimates and completed breeding duck density distribution maps (thunderstorm maps) for all Region 3 Wetland Management Districts.

Region 3 assisted with the development of a new Canada Goose Management permit and issued the first such permit in the country. Region 3 Migratory Birds Permits staff was instrumental in the ongoing standardization of Migratory Bird Permit conditions across the nation and continued development and implementation of the new Service wide Permit Issuance and Tracking System.

The Migratory Game Bird program partnered with several states, USGS Biological Resources Division, Illinois Natural History Survey, the Wildlife Management Institute, Minnesota Waterfowl Association, other NGOs, universities, the Provinces of Ontario and Manitoba, the Mississippi Flyway Council, the Office of Migratory Bird Management, and other Service offices to conduct surveys, research, management, and outreach for migratory birds.

Goals for Fiscal Year 2000

Integrate Regional components of Partners in Flight, Shorebird Conservation, and North American Waterfowl Management Plans and Expand Partnership activities to Deliver integrated Migratory Bird Conservation in Region 3.

Increase support to National Wildlife Refuge and Wetland District staffs in delivery of quality wildlife dependent recreational programs (publications; exhibit design; site planning; regulations; Comprehensive Conservation Plan input).

Strengthen Land and Water Conservation Fund Planning and Budget Development for the Region.

Increase Private Lands Program delivery in the States of Indiana, Illinois, and Michigan, and increase Private Lands Technical Assistance funding for all eight States in Region.

Neal Smith NWR, located in east central Iowa, is home to the largest re-created tallgrass prairie in the United States. This open expanse of prairie provides a home for some of the buffalo that used to roam the prairie landscape.

- USFWS Photo



Fiscal Year 1999 Accomplishments

Forty-Acre Wetland Restored on Hennepin Park Lands

Minnesota Valley National Wildlife Refuge

This multi-partner project restored a 40-acre wetland within the Murphy-Hanrehan Park in Scott County. The Service along with the Minnesota Waterfowl Association designed the project. Funding was provided by grants received from the Metropolitan Council and the Minnesota Department of Natural Resources Conservation Grant Program. Partners include: Minnesota Waterfowl Association, Metropolitan Council, Minnesota Department of Natural Resources. 10/1/98

80-Acre Jailhouse Marsh Restored

Minnesota Valley National Wildlife Refuge

The Service with partner funds from Minnesota Waterfowl Association, Minnesota Department of Natural Resources (DNR), and Metropolitan Council restored a 80-acre river marsh utilized by various wetland wildlife species. In addition, the parking lot was improved for recreational uses of this popular site. Minnesota Waterfowl Association, Minnesota Department of Natural Resources, Metropolitan Council 10/1/98

Electrofishing Used to Sample Fish on Metzger Marsh

Ottawa National Wildlife Refuge

Electrofishing was used to sample fish populations in Metzger Marsh on Ottawa NWR October 1, 1998. In addition to Refuge staff, members of the Ohio Department of Wildlife participated in the effort, supplying electrofishing gear and manpower. The objective of the sampling was to view the fish community before the fish baskets are in operation and the gates are opened to Lake Erie in the spring. Approximately 496 fish, consisting of 17 species were collected. Most abundant were largemouth bass with 139 collected. All fish sampled were measured and marked by fin clipping. 10/01/98

Service Promotes Earth Steward Projects at Fergus Falls Middle School

Prairie Wetlands Learning Center

Teresa Jaskiewicz met with 350 students at Fergus Falls Middle School to discuss Earth Stewards projects. She helped the groups brainstorm and come up with a service project in which the students could participate. The projects increase awareness of local environmental problems among students, and enable them to become problem-solvers. 10/5/99

Union Slough NWR Adds 102 acres

Union Slough National Wildlife Refuge

On October 6, 1998, Union Slough National Wildlife Refuge grew by more than 100 acres with the purchase of the Keith tract in Kossuth County, Iowa. Established in 1937, the Refuge was comprised of 2,850 acres of wetlands surrounded by intensively farmed private land. Beginning in the late 1980's, the Service began acquiring much needed upland buffers from willing sellers. Once restored, these buffers provide valuable nesting cover for waterfowl, increase species diversity, and improve the aesthetic quality of the Refuge. With the newly added Keith tract, the Refuge now covers more than 3,200 acres of wetlands, surrounding uplands, and bottomland forest in an area of Iowa dominated by row crop agriculture. 10/6/98

Refuge Hosts Eighth Deer Hunt for Disabled Hunters

Trempealeau National Wildlife Refuge

On Saturday October 10, 1998, the Trempealeau Sportsman's Club conducted the eighth annual deer hunt for disabled hunters at Trempealeau NWR. Four hunters and their assistants were assigned to designated areas, and after having a natural hunting opportunity, drives were made through the woods by additional volunteers. Although no deer were taken, the hunters all enjoyed the opportunity to be on the refuge engaged in an activity that otherwise may not have been possible for them. Partners

include: Trempealeau Sportsman's Club 10/10/98

Detroit Lakes Wetland Management District Restores 32 Wetlands

Detroit Lakes Wetland Management District

Unseasonably warm weather Oct. 12, 1998, allowed staff at the Detroit Lakes Wetland Management District to complete its restoration of 15.6 acres of wetlands in 32 drained basins on the Lofgren Waterfowl Production Area in Clay County, Minn. A Clemson leveler was also installed in the largest water control structure to keep it from being impacted by beaver activity. The wetlands were quickly filled with water as a result of a five-inch rainfall in late October. The wetlands and associated uplands will provide pairing and nesting habitat for seven pairs of ducks and an estimated 56 ducklings will be produced annually on this portion of the WPA. 10/12/98

Native Seed Collecting on Sherburne NWR

Sherburne National Wildlife Refuge

Sherburne NWR expanded its native seed collecting Program in 1998. Utilizing a new volunteer seed collection program, approximately 60 pounds of uncleaned native forb seed was collected and cleaned by 35 volunteers donating 546 hours. This resulted in 24 pounds of clean seed from 26 native forb species, with an estimated minimum value of \$5,000. Through a cooperative effort with the Sherburne County Highway Department this seed was mixed with sand and spread along a 1/2 mile stretch

of the Wildlife Drive. The seeding was done in mid-November with the use of a sanding truck. Partners include: Sherburne NWR Volunteers, Sherburne County Highway Department 10/15/98

Minnesota Valley Begins to Build New Mail Data Base

Minnesota Valley National Wildlife Refuge

Judie Miller, using a source document developed by John Schomaker, Region 3, developing a comprehensive database for mailings to the public about the Refuge's Comprehensive Conservation Plan. The secondary databases include the Friends, volunteers, environmental education, Junior Duck, Private Lands, and media and outreach databases. Research is being conducted on determining the feasibility of the plan. Some of the secondary databases which are in other software will need to be converted to FileMakerPro. 10/15/98

Alabama Farm Federation Tours DeSoto NWR

DeSoto National Wildlife Refuge

Fifty-four "Sundowners" with the Alabama Farm Federation toured the visitor center and museum and refuge. Sundowners are farm families who are employed full-time off the farm. They manage their farm enterprise during personal time, usually the evening hours. FWB Buske discussed the refuge's sustainable agriculture program, grassland and prescribed burning program, how the Missouri river valley hydrology has changed due to channelization and its side effects, and tour members viewed a variety of wildlife.

Partners include: Iowa State University Extension Service 10/17/98

Open House For Landowners Within Refuge Boundary

Cypress Creek National Wildlife Refuge

Staff from Cypress Creek NWR and the Realty office hosted an information meeting for individuals that own land within the Refuge boundary. The intent of the meeting was to provide an overview of the Realty Program and answer questions associated with the land acquisition. Twenty-five individuals attended the meeting. Questions arose regarding appraised values, condemnation, and move compensation. 10/27/98

Audubon Society Officers Tour Litchfield WPA

Litchfield Wetland Management District

The Litchfield Wetland Management District (WMD) hosted a tour of the thousand acre Lovell Lake Waterfowl Production Area (WPA) for the officers of the Central Minnesota Audubon Society. Topics discussed began with WPA acquisition and management and expanded to include history, funding, easement types, public use, allowed WPA activities, endangered species, future goals, and numerous others including, of course, birds. A package of numerous and various Service brochures was left with the president and will be routed through the rest of the staff. Partners include:

Central Minnesota Audubon Society 10/24/98

Service Addresses College Students About Careers

Minnesota Valley National Wildlife Refuge

Each year, the University of Minnesota offers a class to help students learn more about fish and wildlife careers. The class is designed to assist them in making decisions relative to those careers. The Service, along with the Minnesota Department of Natural Resources and other private conservation groups provided the students with information regarding their respective missions and available positions. On October 27, 1998, Terry Schreiner from Minnesota Valley NWR gave a presentation to the class emphasizing the diversity of positions within the Service and the national and international scope of its mission. 10/27/98

Input Given About Metzger Marsh Fish Structure

Ottawa National Wildlife Refuge

On October 27, 1998, workers from Cootes Paradise in Ontario, Canada, came to view the Metzger Marsh fish passage structure. Doug Wilcox from U.S. Geological Survey and Dave Johnson from Ohio State University were also in attendance for the viewing. A brief discussion and demonstration was held on site. Cootes Paradise has a structure similar to the Metzger Marsh structure. We discussed similarities in design and objectives. They were very helpful in discussing problem which they have en-

countered and offered suggestions for operation. 10/27/98

Fall Count of Sandhill Cranes Results in All-time High

Sherburne National Wildlife Refuge

The fall 1998 survey of sandhill cranes recorded an all time high of 925 cranes roosting on Sherburne National Wildlife Refuge during Fiscal Year 1999. The record count helps establish the refuge as an important fall staging area for cranes in the midcontinent and helps incorporate a new Refuge public event, a morning crane watch, into the Refuge's annual fall Wildlife Festival held in celebration of National Wildlife Refuge Week, scheduled for October 9, 1999. Partners include: St. Cloud State University and Refuge volunteers. 10/20/98

Winona District and Trempealeau NWR Team Up for Habitat

Upper Mississippi River National Wildlife & Fish

Refuge-Winona District
Refuge employees Steve Erickson and Dan McDonah (Trempealeau NWR) have been on the road since early October helping landowners plant prairie grasses and wildflowers, mostly on Conservation Reserve Program (CRP) acreage. So far this fall, Steve and Dan have planted nearly 200 acres on farms in Buffalo, Trempealeau and Vernon Counties in Wisconsin, and Winona County in Minnesota. Seeding native grasses and wildflowers requires specialized equipment which is generally not accessible to landowners in this area. Here's where the Fish and Wildlife Service comes in. Using

a Truax No-Till drill stored at Winona District and a second drill owned by Wisconsin Department of Natural Resources (DNR), Steve and Dan haul the tractor and drill to area farms. Seeding is done at no charge, however, the landowner provides the seed and is responsible for the site preparation. These stands of undisturbed grassland provide important habitat for many species of birds, both in spring for nesting and as winter cover. Although Service policy has dictated that this activity be discontinued on CRP lands as of Sign-up 18, the Winona District is continuing to honor commitments made prior to receiving that change in direction. Partners include: Minnesota Dept. of Natural Resources, Winona County Soil and Water Conservation District, Pheasants Forever, Alma Rod & Gun Club, Wisconsin Dept. of Natural Resources. 11/1/98

Refuge to Receive Major Land Addition

Upper Mississippi River National Wildlife & Fish

Refuge-Winona District
As a condition of the Wabasha Prairie disposal site project, contractor L.W. Matteson is in the process of transferring ownership of approximately 120 acres of wetland property to the Fish and Wildlife Service. The property includes two separate tracts located adjacent to the Winona District boundary in Wabasha County, Minnesota. The property was acquired by the contractor from Henry Barton at a price of \$120,000. It will be donated to the Service for future management as part of the Upper Mississippi River

National Wildlife and Fish Refuge. The tract is located in the Zumbro River bottoms and contains some of the last remaining wetlands on private lands in the area. Partners include: U.S. Army Corps of Engineers, L.W. Matteson Inc., of Burlington, Iowa. 11/1/99

Wabasha Prairie Sand Disposal Project Complete

Upper Mississippi River National Wildlife & Fish Refuge-Winona District
Contractor, LW Matteson, operating under a Special Use Permit from the Winona District has just completed a project in the Kellogg, Minn. area which included placement of 500,000 cubic yards of sand onto 29 acres of Refuge uplands. The sand is being pumped from a storage site within the Mississippi River floodplain to Refuge lands nearly five miles away. The disposal site was contoured, covered with a four to six-inch layer of topsoil and stabilized with mulch and a cover crop seeding to minimize erosion. Removal of this large quantity of sand from the floodplain will greatly reduce the likelihood that channel dredging will further impact Refuge wetlands. The site will be planted to native grasses and wildflowers in 1999, and with management, should provide excellent habitat for prairie wildlife species. Topsoil used to cover the sand disposal area was taken from shallow scrapes on State and Federal lands nearby. As a result, eight small wetlands totaling almost five surface acres were created. Finally, as a condition of the permit to place sand on Refuge lands, the contractor purchased two

parcels of wetlands totaling about 120 acres to be donated to the Refuge. 11/1/98

Cypress Creek NWR Partners With Illinois EcoWatch *Cypress Creek National Wildlife Refuge*

Cypress Creek NWR has been working with the Illinois EcoWatch since 1995 through the RiverWatch monitoring Program. The partnership helps protect and restore native habitat; protect and improve the condition and functional integrity of the Cache River Ecosystem; and encourage participation by volunteer citizens and scientists in monitoring the health of the Cache River its associated wetlands and forests. The partners publicize EcoWatch events on the Worldwide Web (<http://dnr.state.il.us/ecowatch/partner>); involves volunteers in monitoring along the Cache; and share long-term monitoring data. Output: The Refuge and Joint Venture Partners have become Partners with the Illinois EcoWatch Network. The Refuge has been working with EcoWatch since 1995 and has 20 volunteers dedicated to collecting resource data for this long-term monitoring project. Partners include: Department of Natural Resources, The Nature Conservancy 11/2/98

Observation Skills Taught at Middle School by Jaskiewicz *PWLC/Fergus Falls Wetland Management District*

An environmental observation skills activity was demonstrated to 350 seventh grade students and three of their teachers at the Fergus Falls Middle School by Prairie Wetlands Learning

Center Park Ranger/Education Specialist Teresa Jaskiewicz. 11/3/98

History of Riverside Park *Shiawassee National Wildlife Refuge*

On November 4, 1998, the Green Point Environmental Learning Center held its monthly "First Wednesday Discovery Series" Program. This month's topic was "History of Riverside Park." Bill Oberschmidt presented his slide lecture of post cards and photographs of the Riverside Amusement Park, which is now a part of the Shiawassee National Wildlife Refuge. Forty people attended. 11/04/98

6,500 Objects From Steamboat Bertrand Protected

DeSoto National Wildlife Refuge
Over 6,500 objects from the Steamboat Bertrand were removed from exhibit and put in temporary storage to ensure their safety while contractors worked to install a new HVAC system for the museum storage and exhibit areas. Nineteen holes were sawn through an 8"-thick concrete floor, and the 150' floor-to-ceiling viewing glass was professionally washed along with other minor repairs. To minimize the disruption for visitors, the Cargo Viewing Gallery remained open, albeit with little to see but cardboard and plastic sheeting. One week later exhibit re-installation was completed. Project coordination was completed by the museum curator with extensive help from DeSoto staff, volunteers and outside contractor. The moving of this number of objects is extraordinary and has not been

done at DeSoto since 1981 when the exhibit was initially installed. 11/06/98

Native Seed Cleaning Yields Nearly Five Tons

Litchfield Wetland Management District

Craig Lee and Steve Warner of the Litchfield Wetland Management District (WMD) spent a week at the Detroit Lakes WMD cleaning native prairie grass and forb seed harvested at Big Stone NWR. Litchfield ended up with almost 10,000 pounds of cleaned seed that will be used to seed many new Waterfowl Production Areas (WPA) and improve habitat on some established WPAs. Litchfield would like to thank the staffs at Detroit Lakes WMD, Big Stone NWR and Sherburne NWR for the cooperation that made this success possible! 11/6/98

Science Students Learn About Service Careers

Minnesota Valley National Wildlife Refuge

Carlita Payne, Region 3 Ecological Services staff, and Judie Miller, Minnesota Valley NWR, participated in the "Back to Science Night" Saturday, Nov. 6, 1998 at the Refuge Visitor Center. Both individuals interfaced with science students who wished to learn about science related careers with the Service. Carlita spoke about opportunities with the Endangered Species Division as well as other related areas. Judie Miller talked about opportunities at a field station. A table top slide projector was used to illustrate potential aspects of jobs within the Service. In addition each student was given a folder/packet that contained informa-

tion about the Service, volunteer opportunities, and information on student employment programs offered by the Service. 11/6/98

Scouts Make Improvements to Refuge Hiking Trail

Necedah National Wildlife Refuge

A local boy scout troop worked three days to attain an Eagle Merit badge for member Gene Nawrot. Gene organized the volunteers and directed the work effort in first laying down a weed barrier and then spreading about three inches of gravel on the trail. Work was accomplished with help from refuge staff operating equipment. A total of 3,300 feet of barrier cloth and 66 yards of gravel were used to accomplish the task. The trail was much in need of rehabilitation as it was barely visible to users. The rehabilitation will also be more user-friendly to physically challenged visitors. 11/7/98

Volunteer Records Reached at Horicon NWR Staff Visitor Center

Horicon National Wildlife Refuge

Seventeen volunteers recorded 416 hours of donated work to the Horicon National Wildlife Refuge visitors center from August to November 1998. Both the number of volunteers and the donated hours (seven days per week) are record numbers for the Refuge. The volunteers served 11,700 visitors and generated net sales of \$10,000 for the Midwest Interpretive Association. Partners in the project include: Volunteers of

Horicon National Wildlife Refuge, Midwest Interpretive Association, Fond du Lac Audubon Club. 11/12/98

Morris Area High School Mentoring Program

Morris Wetland Management District

Two students from the Morris Area High School spent two days mentoring at the Morris Wetland Management District (WMD) office. Each student prepared a resume and letter of application, had a mock interview and followed along to learn about the job. The main objective is to expose the students to every day work at the Morris WMD and answer any questions the students may have about school, job opportunities, etc. Partners include: Morris Area High School. 11/12/98

Prairiegrass Restoration at Meredosia NWR

Meredosia National Wildlife Refuge

The mild fall allowed refuge staff to plant 20 acres in prairie grasses at Meredosia NWR. Grasses planted included big bluestem, indiangrass, switchgrass, and little bluestem. 11/15/98

Mingo NWR Participates in Missouri Game-Check

Mingo National Wildlife Refuge

Rod Hansen assisted the Missouri Department of Conservation (MDC) and the Missouri Highway Patrol with a road block south of St. Louis on U.S. Hwy. 67. The MDC sponsored road block stopped all traffic northbound on Hwy. 67 to check for game violations. The event took place the night of Novem-

ber 15, the Sunday opener for the Missouri Deer season. Numerous citations were issued by MDC including 11 illegally killed deer and numerous other tagging violations. The highway patrol also made some arrests for other traffic related violations. A grand total of approximately 70 uniformed officers from MDC, Missouri Highway Patrol, Madison County Sheriff Dept, and the Service participated in the check. Partners include: Missouri Dept. of Conservation-Madison County, Missouri Sheriff Dept., Missouri Highway Patrol 11/15/98

Prairie Wetlands Learning Center Invites Volunteers to a Day of Training

PWLC/Fergus Falls Wetland Management District

The second episode of The Prairie Wetlands Learning Center's Eartha Steward Show asked volunteers to attend a day of training at the Prairie Wetlands Learning Center on Nov. 21. There are numerous volunteer opportunities available at the Learning Center. An added treat was the local kindergarten class singing and imitating bird dances for the approximately 5,000 viewers of the local cable TV show. 11/17/98

Refuge Initiates Southern Illinois University Involvement w/ Reforestation

Cypress Creek National Wildlife Refuge

Staff from Cypress Creek NWR and the Cache River Wetlands Joint Venture met with School of Forestry staff at Southern Illinois University (SIU). In the past, SIU has shown little

interest in the Cache River Wetlands and ongoing restoration work. However, five new forestry professors have demonstrated their enthusiasm to become involve with the Refuge and the reforestation effort. The meeting resulted in determining research topics/ possible projects and the commitment to initiate a monitoring Program of bottomland hardwood restoration. Partners include: Illinois Department of Natural Resources, The Nature Conservancy.

11/18/98

Friends Group Receives Funds for Hogue Woods EE Site

Cypress Creek National Wildlife Refuge

Located in the north central portion of the Refuge, this project highlights Hogue Woods, a 200 acre tract of contiguous forest. A grant from the Illinois Department of Natural Resources will provide the resources to develop the site as an outdoor classroom for group Programming. The site has received national recognition for its songbird populations and is a popular wildlife watching spot. Public facilities will provide access to a mature growth forest, reforested uplands, riparian and wetland habitat. The site will offer schools and visitors an interdisciplinary range of educational experiences and recreational opportunities. Partners include: Friends of the Cache River Watershed, Union County Highway Department, Illinois Department of Natural Resources 11/18/98

Morris Elementary Science Projects

Morris Wetland Management District

Darrell Haugen, Kenton Moos and Chad Raitz from the Morris Wetland Management District (WMD) helped evaluate 5th grade students science projects. The three visited with 15 kids and helped them develop their projects. Partners include: Morris Elementary, University of Minnesota at Morris West Central Experiment Station, USDA Soils Research Lab.

11/18/98

Indiana Department of Tourism Visits Muscatatuck NWR

Muscatatuck National Wildlife Refuge

The Indiana Tourism Department visited Muscatatuck NWR with four representatives to make them aware of all the refuge has to offer. They were provided a program and question and answer session on November 20, 1998. This outreach effort will help promote Muscatatuck and the Service. Partners include Jackson County Visitor Center. 11/20/98

Bird Education Program

Tamarac National Wildlife Refuge

Tamarac Refuge's Park Ranger, Betsy Beneke, along with refuge volunteers Bob and Joan Burke and Mary Wyatt, participated in the Detroit Lakes schools "Latchkey Program" in November. Presentations of 1-1/2 hours each were given at three elementary schools on bird education. Topics included migration,

adaptations and feeding. Forty-five children participated and all were happy to take home a pine cone suet feeder which they'd made as a craft project during the class. These presentations fulfilled a "homework" assignment given as part of the "Migratory Bird Education" course that Mary, Bob, Joan and Betsy attended in June through NCTC.

11/23/98

Endicott Marsh Restoration Completed at Muscatatuck NWR

Muscatatuck National Wildlife Refuge

Muscatatuck NWR, in Partnership with Atterbury Job Corp heavy equipment Program, completed the restoration of the 12 acre Endicott North Marsh on November 19, 1998. Atterbury Job Corp brought dozers, scrapers, pans and rollers to train students with a real project. 2,400 hours of "on the job" equipment operation was completed by the students. Partners include: Atterbury Job Corps, Natural Resources Conservation Service 11/30/98

Muscatatuck Breeding Bird Survey Done

Muscatatuck National Wildlife Refuge

Muscatatuck NWR 1998 breeding bird survey results show 83 of 100 points were successfully monitored. A total of 1,240 birds of 70 different species were present. Fourteen species of concern were observed and approximately 20 singing Henslow's sparrows were found at two separate locations on the refuge. The Henslow's sparrow is a noteworthy addition to the

species list from 1997.

11/30/98

Minnesota Valley Staff Complete Firearms Instructor Training

Minnesota Valley National Wildlife Refuge

Terry Schreiner and Andy Mitzel attended a firearms instructor safety training certification program on Nov. 30, 1998. They will partner with other instructors from the Richfield VFW Program to offer a certification course here at the visitor center in the summer of 1999. The Program will provide a needed service to the community and assist in marketing the Young Waterfowlers Program. Firearms safety training is a requirement to qualify for the Young Waterfowlers Program. 11/30/98

Status Report on Spring Lake EMP, Pool 13

Upper Mississippi River National Wildlife & Fish Refuge

The proposed construction in the Upper Lake will accommodate a combination of moist soil and managed marsh operations. This will meet the project objective of providing reliable food resources in the Upper Lake for migratory birds. Habitat diversity for other marsh-dwelling species will be an additional output. The proposed gated inlet structure and excavated channels in the Lower Lake will provide capability to selectively introduce flow into the Lower Lake. Greater dispersion of dissolved oxygen also will be realized. This feature will substantially improve the water quality and aquatic habitat in the Lower

Lake. 12/1/99

Horicon NWR Control of Purple Loosestrife Productive

Horicon National Wildlife Refuge

An estimated 1,300 adult *Galerucella* spp. beetles were released inside the new rearing screen tent with 80-plus pots of purple loosestrife. These beetles produced over 32,500 beetles which were released at four problem purple loosestrife sites on Horicon Marsh. 12/1/98

Permit Deer Gun Hunts Conducted at Fox River NWR

Horicon National Wildlife Refuge

The permit hunts at Fox River NWR were only moderately successful. A special gun antlerless-only season was established by the Wisconsin Department of Natural Resources for the zone that Fox River NWR is within for Oct. 29 - Nov. 1, 1998 in an effort to reduce the large deer herd. An additional three bonus antlerless permits were provided to hunters at no charge. Two permit hunts were conducted on the refuge for the four day season with 20 hunters hunting two days. Of the 40 hunters, only 17 does were known to be taken. The third permit hunt was conducted opening weekend of the regular deer gun season Nov. 21-22, 1998. Twenty-five hunters were selected for this permit hunt with 23 hunters participating. A total of 21 deer were harvested by 14 hunters. The refuge was open to the public for the remainder of the nine day season. 12/1/98

Rice Lake Environmental Management Program Project Completed

Minnesota Valley National Wildlife Refuge

The Rice Lake Habitat Rehabilitation and Enhancement Project was completed through the Environmental Management Program. Water control capability was established on two wetlands totaling 320 acres. Construction items included two earthen berms with repair of a river-related breach in the Continental Grain Marsh natural levee; construction of a water control structure; and excavation of an intra-lake channel to maximize drawdowns. In addition, 45 acres of floodplain forest was reestablished by tree plantings in a former agricultural field adjacent to the wetlands. Water management capabilities will allow reestablishment of native aquatic vegetation, improve water quality, and habitat for wetland-dependent species.

12/1/98

WRP Encouraged in Muscatatuck River Basin

Muscatatuck National Wildlife Refuge

Muscatatuck NWR continues to work off the refuge with Natural Resources Conservation Service to increase the Wetland Restoration Program (WRP) acreage in the Muscatatuck River Basin. In November 1998, two sites totaling 68 acres were field checked and the landowners will try and bid these lands into WRP. Partners include: Natural Resources Conservation Service. 12/1/98

Tundra Swan Research on the Upper Mississippi Refuge

Upper Mississippi River National Wildlife & Fish Refuge

University of Minnesota graduate student, Erik Thorson has radio-collared 20 tundra swans staging on the Mississippi River this fall. The 20 birds were captured by night-lighting at eight sites between Wabasha, Minn. and McGregor, Iowa. Mr. Thorson intends to answer management questions about day and night time use of the River by the swans. The birds have shown wide movement patterns, as determined from aerial and ground tracking. The high percentage of cygnets found within the population means this region of the Upper Mississippi River National Wildlife and Fish Refuge is very important for migrating family groups.

12/1/98

Green Point Learning Center Features "Night of the Wolf"

Shiawassee National Wildlife Refuge

The Green Point Environmental Learning Center held its monthly "First Wednesday Discovery Series" Program on December 2, 1998, at 7:00 p.m. This month's topic was "Night of the Wolf". Thirty-eight people attended the informative Program that included displays, a video, and storytelling about wolves. The purpose of the Program was to attempt to separate the myths from the facts of the wolf. 12/2/98

Thief Bay Dike Rehabilitation Completed

Agassiz National Wildlife Refuge

Rehabilitation of 7,881 linear feet of the Thief Bay Dike began in July 1998 and was completed on November 6. Final payment was sent on December 2. Rehabilitation included recoring and reshaping dike, tailgate spread 400 tons of Class 5 gravel, and delivery of 583 tons of Class III riprap. Construction was completed by Frontier Construction Company (8A Contract) and paid for with flood monies. Seeding of the dike was completed by refuge staff. 12/2/98

Barrens Program Given to SAF Student Chapter

Necedah National Wildlife Refuge

Twenty members of the University of Wisconsin-Stevens Point Student Chapter of the Society of American Foresters attended a presentation about oak and pine barrens restoration at Necedah NWR by Park Ranger Power. Power discussed the definition of barrens and gave an overview of the issues and techniques surrounding barrens restoration at the refuge. Three students expressed interest in becoming refuge volunteers.

12/3/98

Seed Planting Conducted on Gregory Landing Division

Mark Twain National Wildlife Refuge, Annada District.

Maintenance Mechanic Sam Milazzo, Tractor Operator Alan Lagemann, and Temporary Biological Technician Land Mueller planted 87 acres of pin oak and pecan seeds on the Gregory Landing Division. The area that was planted was the newly-acquired Winkelman property on the east side of the Burlington-Northern railroad tracks. Approximately 250 lbs. of pecans and 400 lbs. of pin oaks were used to convert previously planted agricultural land to bottomland hardwood forest.

12/3/98

91,868 Pounds of Native Seed Processed at Detroit Lakes WMD

Detroit Lakes Wetland Management District

More than 91,800 pounds of native grass and forb seed was processed at the Detroit Lakes Wetland Management District (WMD) seed cleaning facility during the fall of 1998. The seed, which has an estimated retail value of \$2.6 million, will be used to establish 5,600 acres of habitat for nesting waterfowl and other wildlife throughout Minnesota and eastern North Dakota. An estimated 613 ducks will be produced annually in this habitat and numerous other migratory and resident wildlife species will also benefit. These acres will provide additional acres for recreational activities such as hunting, trapping, bird watching, hiking, and cross-country skiing.

12/4/98

Jaskiewicz Visits Deep Portage Conservation Reserve

PWLC/Fergus Falls Wetland Management District

Teresa Jaskiewicz, Prairie Wetlands Learning Center (PWLC) staff member, was among the eight chaperones and two Fergus Falls Middle School teachers that took 75 six grade students to visit Deep Portage Conservation Reserve Dec. 3-4. She was able to experience first hand how Deep Portage handles it's residential Programs. This knowledge will be helpful as PWLC starts their residential operation. 12/4/98

Friends of the Rydell Refuge Host Tree Harvest

Detroit Lakes Wetland Management District

In accordance with the Rydell NWR's Comprehensive Conservation Plan (CCP), the Friends of the Rydell Refuge hosted the first "Cut Your Own" spruce tree harvest on December 5. The harvest is part of a process to restore a portion of the Refuge back to the maple/basswood forest ecotype similar to what occurred there before the homesteading era. More than 115,000 spruce trees had been planted by the former owner of the refuge property. Spruce trees are not native to that part of Minnesota and the CCP calls for them to be replaced by native tree, shrub, and grassland species. 12/5/98

Bill Peabody, Regional Director for Ducks Unlimited Retirement Banquet

Fergus Falls Wetland Management District

Mr. Bill Peabody, Regional Director for Ducks Unlimited in western Minnesota, retired in September 1998. On Dec. 5, a banquet was held in his honor at which time Jim Piehl, from the Fergus Falls Wetland Management District (WMD), presented Mr. Peabody with an award for his many years of work in conservation of natural resources. Proceeds from the fund-raiser that was held after the banquet will be used to build a new water control structure at the Eng Lake Waterfowl Production Area in Douglas County. Eng Lake will be dedicated to Mr. Peabody in the spring of 1999. 12/5/98

Girl Scouts Assist Mingo NWR

Mingo National Wildlife Refuge

A Jackson, Mo., Girl Scout Troop is assisting staff at Mingo National Wildlife Refuge with labor to accomplish resource objectives. The troop has dedicated to visit the refuge one day each weekend for a three month period to work on acorn planting, trash removal, seed harvesting, and other various other labor intensive details. Martha Koeller, the troop leader stated "The wildlife doesn't quit in the winter, so neither will we." 12/6/98

Short-Eared Owls Flock to Refuge

Shiawassee National Wildlife Refuge

Over 90 percent of the historical wet meadows in the Saginaw Bay Watershed have been destroyed. Several years ago, Shiawassee NWR restored wet meadow habitat on 240 acres that was being farmed. A wealth of avian benefits were derived from this restoration. Since mid-November the site has been home to 14 short-eared owls, over 20 northern harriers, and three rough-legged hawks. Though the lack of rain this past year reduced the attractiveness of this area to shore and waterbirds, conditions are appropriate for meadow voles. Numerous visitors are taking advantage of this infrequent opportunity to see these owls. 12/7/98

Czech Forester Tours Necedah NWR

Necedah National Wildlife Refuge

A Czech Republic forester, Lubomir Salek, was given an orientation and tour of the Necedah NWR by Refuge Manager Wargowsky and Biologist King on Dec. 7, 1998. Mr. Salek was accompanied by three other Wisconsin foresters. The Necedah NWR oak savanna restoration Program was highlighted during the tour. Partners include: Wisconsin Department of Natural Resources 12/7/98

Muscatatuck Staff Give Presentations

Muscatatuck National Wildlife Refuge- Jefferson Proving Ground

The Muscatatuck NWR-Jefferson Proving Ground (JPG) staff members Joseph R. Robb, Stephen A. Miller, Teresa Vanosdol-Lewis, and Jason Lewis, presented initial results of the Service's work at Jefferson Proving Ground at the 60th Midwest Fish and Wildlife Conference. The staff gave an oral presentation "Production of Interior Forest and Grassland Birds on Jefferson Proving Ground: Are They Compatible?" and a poster "From Bombs to Birds: Lessons in Ecosystem Management at Jefferson Proving Ground". Both presentations were well received and highlighted the importance of JPG's natural resources. 12/8/98

Annual Easement Compliance flights completed

Fergus Falls Wetland Management District

The Fergus Falls Wetland Management District completed their annual easement compliance flight for Otter Tail, Douglas, Grant and Wilkin Counties. Eighteen potential easement violations were documented. 12/9/98

Minnesota Valley NWR Stages Major Cleanup

Minnesota Valley National Wildlife Refuge

Minnesota Valley NWR worked with its partners to clean up a five-acre parcel of land in Scott County. The area covered multiple ownerships including Service, Minnesota Department of Transportation (MNDOT), Minnesota Department of Natural Resources, and the Scott County Highway Department. The Department of Corrections, City of Shakopee and volunteers collected and piled the trash. Service, MNDOT, and Scott County crews loaded and hauled away seven dump truck loads of trash. Partners include: Minnesota Departments of Transportation and Corrections, Scott County Highway Department, City of Shakopee, Minn.. 12/10/98

Canal Gate Repair Completed at MNWR

Muscatatuck National Wildlife Refuge

Leaking Richart Lake canal gate replaced at Muscatatuck NWR by private contractor completed Dec. 10, 1998. It is important to have this gate once again operational to enhance the wetland management of seven units totaling 700 acres of wetlands. 12/10/98

Bat Cave Opened at McGregor District Office

Upper Mississippi River National Fish and Wildlife

Refuge - McGregor District

A cave opening at the Upper Mississippi River NWFR, McGregor District Office, was recently opened after being blocked off for many years. The cave openings, at the District's Visitor Contact Station, were originally used for beer and ice storage by a brewery located on the site in the 1860's. Historically the caves were host to hundreds of bats and were locally known as the bat caves. The caves were later bricked over for safety reasons. One cave was reopened and custom fitted with a gate to allow bats in for hibernation, but to keep children out. One Eastern pipistrel is using the cave this winter. An interpretive sign was developed educating the public on the value of bats. 12/10/98

First Horicon Marsh Internship a Success

Horicon National Wildlife Refuge

Full-time fall intern Katie Bares worked with several partners; helped staff the refuge Visitor Center, field trips and special events; led all of the fall Goose Talks; partially developed a field trip guide for educators; and gained valuable classroom experience. She helped develop a "Wild Things" traveling wildlife trunk for Horicon NWR. The refuge provided training, supervision, workspace/computer, and overall coordination, while Marsh Haven provided housing, Midwest Interpretive Association provided \$1,000 stipend, and Designs by Vine

provided a computer and work space. Partners include: The Midwest Interpretive Association, Marsh Haven Nature Center, Washington Elementary School, Vine's Designs, and Horicon NWR. 12/11/98

Muscatatuck NWR Helps Plan Protection of Binkley Cave System

Muscatatuck National Wildlife Refuge

Muscatatuck NWR, in Partnership with The Nature Conservancy (TNC), held a meeting to review the final report findings of the Ohio River Valley Ecosystem Team cave/karst subgroup project on the Binkley Cave System. The report found that the 21 mile cave system, all under private lands, is the largest cave in Indiana with 74 species of fauna including 21 species of significant global rarity (eight new to science) and that this cave system is biologically significant. Meeting attendance included 10 people representing Indiana Karst Conservancy, TNC, government agencies, private industry and private individuals. The group held a brainstorming session to help plan and implement conservation efforts within this unique cave/karst area of Indiana. 12/11/98

Red River Basin Board

Fergus Falls Wetland Manage- ment District

Kevin Brennan from the Fergus Falls Wetland Management District (WMD) serves on the Fish/Wildlife and Outdoor Recreation Team for the Red River Basin Board. This was the fourth meeting attended, the next is scheduled for Jan.

22, 1999. The vision for the team is to restore and maintain an environment in the Red River Basin that provides for a quality human life, prosperous agriculture, flourishing communities, improved water quality, abundant wildlife and healthy habitats, holistic water management, and increased outdoor recreation development; all which support the future for compatible long term economic growth. There are also many goals and challenges which the team has identified. Kevin will continue to serve on the committee and strive for greater ecosystem management. Partners include: National Audubon Society, Manitoba Department of Natural Resources, U.S. Geological Survey, Natural Resources Conservation Service, Minnesota Department of Natural Resources and the Sierra Club

12/14/98

Congressman-Elect Hill Visits Muscatatuck

Muscatatuck National Wildlife Refuge

Muscatatuck NWR and the Green Thumb Program sponsored a visit to the refuge by Congressman Elect Baron Hill and one of his staff Dec. 15, 1998. He is a local Seymour native and said he enjoys visiting the refuge with his daughter. We were able to provide him with a lot of information about Muscatatuck and the Service that he was unaware of. 12/15/98

Darby Technical Work Panel Reviews Draft Goals and Objectives

Reynoldsburg Field Office

The second meeting of the Technical Work Panel enlisted to help the Service focus issues relating to the proposed Darby Prairie National Wildlife Refuge was held on Dec. 15. The meeting focused on one agenda item, the draft goals and objectives for the refuge. Twenty of the 30 members were in attendance. Generally, those in attendance were broadly supportive of how the Service framed the goals and objectives and in particular with consideration for agriculture. The USDA Farm Bureau representative cited their recently adopted policy relating to the refuge which reflected its opposition. However, he was objective about alternatively supporting the Service given the consideration for agriculture in the goals and objectives. Recurring issues such as drainage and eminent domain were mentioned again, but with less emphasis. Also, some minor changes were suggested by several members. 12/15/98

Retrival System for Maps and Plans Instituted

Minnesota Valley National Wildlife Refuge

Minnesota Valley NWR completed a new file indexing and retrieval system for maps, concepts and design plans, and other documents. The new system greatly improves the efficiency of daily operations. 12/15/98

Necedah Cleans Up With Small Lot Sale

Necedah National Wildlife Refuge

Approximately 300 items of excess and unserviceable property were identified from house cleaning efforts during CY 1998. They were brought to a storage building and adjacent shed and arranged into 77 similar lots with minor assistance by the Wisconsin Conservation Corps crew. On Dec. 7, an announcement of the sale was sent to seven area newspapers. Prospective bidders were allowed to view the items and submit closed bids for each lot from Dec. 14 - 16, 1998. At noon on Dec. 16, the viewing and bidding was closed and submitted bids were opened and the successful bidder identified. Each was then notified and requested to pay for and pick up the excess property by Dec. 18, 1998. 12/16/98

Refuge Force Account Team Work on Lake Chautauqua

Chautauqua National Wildlife Refuge

The refuge force account team, with support from other refuges and volunteers, completed construction of two spillways with gabion baskets (each 750 feet) and construction of 1.2 miles of setback levee 1/4 mile from the Illinois River and rebuilt 3.8 miles of levee. Completion of these projects will provide full water management capabilities for managing the pool for waterfowl, shorebirds,

fish and other wildlife. 12/17/98

Draft of Public Use Plan Sent for Public Comment

Fergus Falls Wetland Management District

The Fergus Falls Wetland Management District (WMD) sent out 40 copies of the draft Public Use Plan for public comments. The draft copies were sent to county commissioners, public libraries, various other agencies and individuals through out the district. It was sent out December 17, 1998 and requested comments back by January 25, 1999. 12/17/98

Lake Chautauqua HREP Completed

Chautauqua National Wildlife Refuge

The Habitat Restoration and Enhancement Project is complete on lake Chautauqua. The project included construction of a 41,000 gallon per minute pump station, a three bay water control structure in the north pool, a two bay water control structure in the south pool, a boat ramp and rehabilitation of two miles of levee and .5 miles of cross dike. This contract was plagued in the early stages by poor contractor performance and flooding; and after three years of work and loss of a major water control structure, the refuge was worse off than before construction started. The U.S. Army Corps of Engineers made the commitment to the Service that they would fix the problems and finish the project to give us a functional system to serve our needs. This has been accomplished. 12/17/98

Stone Lake Restoration Project Begins

Litchfield Wetland Management District

Stone Lake is located approximately one mile northwest of the city of Litchfield, Minn. This 206 acre basin was partially drained by private ditches in 1907 and again in the early 1960s. Earlier efforts to restore the lake's hydrology failed. In 1997 the Service purchased 123 acres on the eastern portion of the lakebed and designated it the "Stone Lake Waterfowl Production Area." With cooperation from adjacent private landowners, the Service secured a permit from Minnesota Department of Natural Resources to install a water control structure on Service property in the drainage ditch at the outlet of the basin. Ducks Unlimited (DU) took interest in this high profile project and provided most of the funds for restoration construction. Project construction by DU's private contractor commenced on December 14, 1998. Partners include: Minnesota Department of Natural Resources, Ducks Unlimited, Pheasants Forever, neighboring landowners 12/17/98

Necedah Honors Refuge Volunteers

Necedah National Wildlife Refuge

Necedah NWR held its annual volunteer appreciation night on Dec. 18, 1998. Staff members, volunteers, and their relatives enjoyed a buffet dinner followed by the ceremony. Each refuge volunteer was given a 1999 National Wildlife Refuge calendar. In addition, 500-hour and

100-hour pins were given to two exceptional volunteers. Bryce Berklund was honored as Necedah's 1998 Refuge Volunteer of the year. Total attendance was 45. 12/18/98

Necedah Volunteer Reaches 500 hours!

Necedah National Wildlife Refuge

On Dec. 18, 1998 Ruth Kies was given an award acknowledging her volunteer efforts at the Necedah NWR. She joined the "500 hour club" with her time donation towards the accomplishment of refuge goals. Her volunteer time was divided into biology and public use, helping with research and assisting with public use programs. Ruth is also currently the treasurer of the Friends of Necedah National Wildlife Refuge, Inc. 12/18/98

1998 Refuge Volunteer of the Year Selected

Necedah National Wildlife Refuge

On Dec. 18, 1998, Bryce Berklund was honored acknowledging his volunteer efforts at the Necedah NWR as the 1998 Refuge Volunteer of the Year. Bryce has shown dedication, enthusiasm, and unfaltering support towards refuge and Service goals. He assisted with projects in maintenance, biology, forestry, fire, education, and administration. Bryce is also serving currently as vice president of the Friends of Necedah National Wildlife Refuge, Inc. 12/18/98

Thirty-three Species on Sherburne NWR Christmas Bird Count

Sherburne National Wildlife Refuge

A total of 33 species were observed during the Christmas Bird Count held on Dec. 19, 1998 at Sherburne NWR. The event, sponsored by the Friends of Sherburne, drew 12 participants for the dawn to dusk count. A golden eagle juvenile was the rarest sighting of the day. Other highlights were trumpeter swans, wild turkeys and gadwall. The 2,326 birds sighted are a 36 percent increase over the 1,481 seen during the 1997 count. The increase may be due to the warm weather and the open water which kept many birds in the area longer. 12/19/98

Christmas Bird Count on Cypress Creek Refuge

Cypress Creek National Wildlife Refuge

Thirty volunteers showed up on a miserable cold and rainy day for the bird count. The day proved to be very successful in that 98 species of birds were recorded. Partners include: Illinois Department of Natural Resources, The Nature Conservancy, Audubon Society, Illinois Natural History Survey 12/21/98

Litchfield PFW Program Benefits From Long Dry Fall

Litchfield Wetland Management District

The Litchfield Wetland Management District (WMD) Partners for Fish and Wildlife Program took full advantage of the unseasonably warm fall by restoring 337 acres of wetlands thus far in Fiscal Year 1999. Private lands

staff revived 128 drained wetland basins on 38 different sites. Repair work was conducted on eight additional wetlands previously restored.
12/21/98

Moving Dirt on Newly Acquired WPAs

Litchfield Wetland Management District

Private lands staff rejuvenated 24 drained wetland basins on two recently acquired tracts, Boon Lake and Goose Lake Waterfowl Production Areas, this fall. The 52 acres of restored wetland complexes will be complimented by the sowing of native grass nesting cover next spring. Waterfowl, neo-tropical migrants, and resident wildlife will accrue outstanding production benefits from this prairie pothole restoration effort.
12/21/98

Dead Adult Bald Eagle Found *Mark Twain National Wildlife Refuge, Wapello*

A dead adult bald eagle was discovered by Iowa Department of Natural Resources Biologist Bill Ohde and Wapello Resident Ron Cross. Cause of death appears suspicious, so the eagle will be sent to the National Wildlife Forensics Laboratory in Ashland, Ore. for necropsy.
12/22/98

Trumpeter Swan Migration Project

Muscatatuck National Wildlife Refuge

Successful arrival of swans covered by five TV stations, including CNN, 15 newspapers (front page Cincinnati Enquirer and Indianapolis Star) and 10-15 radio stations including State-

wide Network Indiana. With a short two hour notice, 100-150 very excited refuge visitors were on hand to welcome the swans to the Refuge. The project is an effort to establish a migrating flock of trumpeter swans in the interior population. Partners include: Migratory Bird Research Group, Ontario, Canada 12/23/98

Wildlife Observation Decks Open to the Public

Upper Mississippi River National Wildlife & Fish Refuge - La Crosse District

A project which began in 1994 to construct an observation deck on Lower Pool 8 (Upper Mississippi River National Wildlife and Fish Refuge - La Crosse District) has finally been completed. The project was delayed due to the lack of funds, lack of interested contractors, and unsatisfactory contractors. However, on the third request for quotations, a contractor was found. In the end, two decks were built by Voss & Sons, Inc., for \$55,000. The District annually receives over 1.3 million visitors. These are the only observation decks currently located on the District and should receive a tremendous amount of use, the extent of use is unknown at this time. Partners include: Minnesota Department of Transportation, U.S. Army Corps of Engineers, La Crosse Co. Park Department, I & M Railroad, Tri-County Electric, and Southern Bluffs Elementary. 12/23/98

Litchfield's Law Enforcement Program Steps Up Efforts In FY99

Litchfield Wetland Management District

Refuge Officers Luke and Bell expanded compliance check activities during Minnesota's 1998 hunting seasons by contacting more than 200 hunters resulting in 11 Notice of Violations for Migratory Bird Treaty and Refuge Act offenses, including unplugged shotgun (1), unlawful camping (2), vehicle trespass (2), and construction of permanent deer stands (6) on District Waterfowl Production Areas. Numerous warnings were issued for trespassing, personal property abandonment, and possession of untagged migratory game birds, alcohol and toxic shot violations. Assistance was also rendered to state Conservation Officers involving cases of deer baiting and illegal burning of environmental contaminants.
12/28/98

Swan Lake NWR Christmas Bird Count

Swan Lake National Wildlife Refuge

On Dec. 30, 1998, ten participants completed the 24th annual Swan Lake Christmas Bird Count. All birds seen or heard within a 15 mile circle, which includes Swan Lake National Wildlife Refuge, were counted. Sixty-one species and 6,722 individual birds were counted by the four separate parties. Highlights included the rare sighting of pied-billed grebe, great blue heron, common snipe, killdeer, and lapland longspurs. An unusual species encountered

requiring documentation were a flock of rusty blackbirds. The Christmas Bird Count data over time in the Swan Lake area provides insight into the long-term health of bird populations. Partners include: Grand River Chapter of the Audubon Society, Columbia Chapter of the Audubon Society.
12/30/98

Wetland Partnership exceeds 6,000 acres to be rest

Wisconsin Private Lands Office
The Wisconsin Wetlands Partnership consisting of Service, Natural Resources Conservation Service, and Wisconsin Waterfowl Association has achieved over 6,000 acres of wetlands and associated uplands to be restored in the state. These lands will be enrolled in the Wetlands Reserve Program as either 10 year, 30 year, or permanent easements. The projects are developed, and designed by three biologists working out of Service offices and supervised by Service private lands staff.. Partners include: Natural Resources Conservation Service, Wisconsin Waterfowl Association
1/3/99

Refuge logs successful quarter for Environmental Education and Interpretation Programs

Minnesota Valley National Wildlife Refuge
Approximately 4,160 visitors were reached through environmental education and interpretation Programs at Minnesota Valley National Wildlife Refuge from October - December 1998. Programs included pre-school, scout, educator workshops, and community events. The largest

number of visitors reached was through National Wildlife Refuge Week events in October, where over 1,200 visitors were contacted. The refuge staff partnered with Education Strategies, from the Office of the Attorney General, to host four teacher workshops on environmental education. The refuge staff also partnered with the Mall of America to participate in the annual Ecommunities event. Ecommunities is a two-day event at the Mall focused on preserving our planet. Refuge staff hosted a booth displaying endangered species items and information. Partners include: Dowling Urban Environmental Education Center, Broadway School, St. Thomas Academy, Education Strategies-Attorney General's Office, Mall of America.
12/31/98

Youth Waterfowl Hunt Successful on Ottawa NWR

Ottawa National Wildlife Refuge
On Oct. 1 and Nov. 14, 1998, a special youth hunt was held. Eighteen young hunters were given an opportunity to experience waterfowl hunting under adult supervision. Hunters were chosen using a pre-season computerized drawing. Eleven geese and 18 ducks were harvested. The hunt was successful from the point of view of the hunters, the Ohio Division of Wildlife and Ottawa NWR by providing high standards in quality hunting, opportunity and success per hunter.
12/30/98

Adult Waterfowl Hunt Successful on Ottawa NWR

Ottawa National Wildlife Refuge
The 1998 cooperative waterfowl hunt on Ottawa NWR was successful from the point of view of the hunters, Ohio Division of Wildlife and Ottawa NWR by providing high standards in quality hunting, opportunity and success per hunter. Two hundred seventy hunters, hunting on 17 days, bagged 52 Canada geese and 79 ducks for a success rate of .49 birds per hunter. Mallards dominated the duck harvest. A maximum of 15 non-toxic shot shells were permitted for each hunter.
12/30/98

Muscatatuck NWR (JPG) Has Deer Hunt

Muscatatuck National Wildlife Refuge (JPG)
The deer population at Jefferson Proving Ground was reduced by 404 during the State and Military hunting season. Fish and Wildlife Service staff and Jefferson Proving Ground Site Management worked together to hold the annual deer hunt.
12/31/98

Audubon's Christmas Bird Survey

Fergus Falls Wetland Management District
Staff members from the Fergus Falls Wetland Management District (WMD) assisted with Audubon's Christmas Bird Survey. Forty-seven species were recorded in Fergus Falls survey route, while 37 species were recorded in the Battle Lake survey route. This annual survey records bird species and numbers in the area.
1/3/99

Muscatatuck NWR has successful deer season

Muscatatuck National Wildlife Refuge

Muscatatuck NWR was assisted by the Indiana Department of Natural Resources in holding the annual refuge deer hunt. Approximately 2,400 archery and muzzleloading gun hunters were successful in reducing the refuge population by harvesting 70 deer. 1/3/99

Wetland Restoration Effects Continue

Muscatatuck National Wildlife Refuge

Muscatatuck NWR continues to work off the refuge with the Natural Resources Conservation Service to increase the Wetland Restoration Program (WRP) acreage in the Muscatatuck River Basin. In December, two sites totaling 122 acres were field checked and the landowners will try and bid these lands into WRP. 1/3/99

Busy First Quarter for Partners Program

Leopold Wetland Management District

The first quarter of Fiscal Year 1999 was busy for the District's Partners for Fish and Wildlife Program. Leopold staff restored 45 wetland basins covering 142.7 acres on private lands during the three month period. Partners include: Wisconsin Department of Natural Resources, Various County Land and Water Conservation Districts 1/3/99

Green Point Learning Center Features "The Call of the Loon"

Shiawassee National Wildlife Refuge

Twenty-one people attended Green Point Environmental Learning Center's First Wednesday Discovery Series Program on Jan. 6, 1999. This month's Program was called "The Call of the Loon." Participants watched a video on loons, viewed displays, and had an open discussion about the birds. 1/6/99

Swan Lake NWR Nominated as a Regional Western Hemisphere Shorebird Reserve Network Site

Swan Lake National Wildlife Refuge

Swan Lake National Wildlife Refuge was nominated to become part of the Western Hemisphere Shorebird Reserve Network (WHSRN) as a Regional site. WHSRN is a network of lands recognized as important sites vital for the continued survivability of migrating and breeding shorebirds. WHSRN was established to promote and support the conservation of truly hemispheric shorebirds shared by all countries from pole to pole. Swan Lake NWR may host up to 21,000 shorebirds of 33 species annually which meets the WHSRN criteria as a Regionally important site. Regional sites in WHSRN receive recognition as major critical habitats for migratory shorebirds. Membership provides benefits including site dedication assistance, project development assistance to conduct research, monitoring, land management improvements, public outreach or educational activities and participation

in WHSRN networking activities among sites including twinning, personnel exchanges, training and strategic planning. Partners include: Missouri Dept. of Conservation, Grand River Chapter of the Audubon Society, Columbia Chapter of the Audubon Society, Sumner Community 1/7/99

Annual Eagle Watch a Success

Upper Mississippi River National Wildlife & Fish Refuge

The Second Annual Upper Mississippi River Eagle Watch was held on Saturday, January 9 at the Dresbach Information Area (Minnesota Department of Transportation). The Information Area provides an excellent heated view of open water on the Upper Mississippi River National Wildlife and Fish Refuge. Approximately 80 people came to the event to view bald eagles on the river. Three mounted eagles were on display inside the Information Area. Refuge volunteers assisted with the event and answered questions about the eagles. Partners include: Upper Mississippi River NW&FR, Coulee Audubon Society, Friends of the Upper Mississippi River Refuges, Upper Mississippi River Interpretive Association, Minnesota Dept. of Transportation 1/9/99

Muscatatuck NWR Hosts Christmas Bird Count

Muscatatuck National Wildlife Refuge

Seventeen Muscatatuck NWR birders participated in a National Audubon Society sponsored Christmas Bird Count on the refuge Jan. 1, 1999. 72 species of birds were found including two bald eagles and four trumpeter swans. Partners include: National Audubon Society, Indiana Audubon Society. 1/10/99

Disabled Hunter Finds Success at Mingo Hunt

Mingo National Wildlife Refuge

Randy Wallace, permanently disabled and restricted to a wheelchair, found hunting success at a managed deer hunt on Mingo National Wildlife Refuge. Wallace successfully took two does with a muzzleloader during the early January hunt. Refuge staff built a mobile wheelchair accessible blind that can be easily moved from one location to another. Doug Siler, Heavy Equipment Operator came up with the design for the blind which can be hooked up to a three point hitch for transport. 1/10/99

53 Percent of Nestbaskets Successful on Detroit Lakes Wetland Management District

Detroit Lakes Wetland Management District

Of 128 nesting baskets placed in wetlands on waterfowl production areas at Detroit Lakes Wetland Management District, 39 were successfully used by mallards to produce 312 ducklings; 35 nests were used by Canada geese to produce 210

goslings. There was no evidence of nest predation on any of the nesting baskets and eight of the successful baskets had two nests in them. Partners include: Ducks Unlimited and numerous volunteers.

1/11/99

Litchfield WMD - Ducks Unlimited Complete Stone Lake Project

Litchfield Wetland Management District

On January 11, 1999 a project completion meeting was held between representatives of the Service, Ducks Unlimited and the private contractor at the site of the Stone Lake restoration project. The project involved installing a water control structure in a drainage ditch on the newly acquired Stone Lake Waterfowl Production Area. The structure will retain spring snowmelt and runoff and thereby restore 207 acres of prime wetland habitat. At the meeting representatives of the Service and Ducks Unlimited certified that the project had been completed by the contractor according to engineering plans and specifications. Partners include: Ducks Unlimited, Inc., Meeker County Chapter of Pheasants Forever 1/11/99

Seney NWR Announces Amateur Photo Contest Winners

Seney National Wildlife Refuge

Seney NWR's Amateur Photo Contest gives visitors a chance to capture their Refuge experience on film and share it with other visitors, giving them an

idea of the wealth of visual images they may encounter. Visitors vote on the photos in the categories of Wildlife, Recreation and Landscape. Winning photographs appear in Seney NWR's newsletter and in local newspapers.

1/11/99

Empowerment Zone Designation in Southern Illinois

Cypress Creek National Wildlife Refuge

The Southernmost Illinois Delta was one of five selected from 165 applicants as an Empowerment Zone. Refuge staff are part of the assembled coalition; the Cache River is in the heart of the zone and represents tourism potential for the area. This may provide sources of funding for a wide range of public use facilities and services. Partners include: Illinois Department of Natural Resources, Southernmost Illinois Tourism, Pulaski/Alexander Counties

1/13/99

Eagle Scout project for the PWLC

Fergus Falls Wetland Management District

To earn his Eagle Scout Badge, Local boy scout John Hjelle, coordinated the building of 12 benches used along the Prairie Wetlands Learning Center trail. The money for the project came from two sources: \$350 was donated in memory of William Deering and \$250 from Lutheran Brotherhood Insurance. Seven scouts and three adult supervisors along with Larry Childs from the Wetland Management District spent three evenings

constructing the benches.
1/14/99

Midwinter Bald Eagle Count

Mark Twain National Wildlife

Refuge - Brussels District
Mark Twain NWR - Brussels District participated in the Illinois State Bald Eagle count on Jan. 16. Seven teams of 23 people covered over 100 miles from Hartford to Hamburg (Mississippi River Road) and from Grafton to Pearl (Illinois River Road). A total of 621 eagles were spotted, including 137 eagle observed at the three divisions of Mark Twain NWR - Brussels District. Partners include: Illinois Department of Natural Resources, Illinois Audubon Society
1/16/99

Necedah NWR Hosts First Cross Country Ski Workshop

Necedah National Wildlife Refuge

On Saturday, Jan. 16, 37 people attended an Introduction to Cross Country Skiing Workshop held at the Necedah NWR. Using skis provided by the Friends of Necedah National Wildlife Refuge, the students from age three to 65 were instructed on the basics of the popular winter sport by Refuge employee Clerk Rabuck with assistance of the Friends and Refuge employee Arciszewski. Topics included selecting skis, dressing for the weather, putting on equipment, moving on skis, falling and getting back on your feet and techniques for moving forward. After the familiarization, the group was lead on the Pair Ponds trail to practice these skills. Leaders and members of a 4-H club

were also in the group. The Friends group provided refreshments following the trail navigation. 1/16/99

Horicon NWR Celebrates Volunteer Achievements

Horicon National Wildlife Refuge

In 1998, 200 people volunteered 5,624 hours at Horicon NWR which has an estimated value of \$70,300. Steve Easterly was named Volunteer of the Year. Amanda Schrank was named the individual who worked the most hours, and the Beaver Dam Charter School was named the group with most hours. About 50 people attended the annual volunteer recognition event held on January 18. Four newspapers papers covered the event. About 100 news releases were mailed afterwards. Partners: University of Wisconsin-Stevens Point, University of Wisconsin-River Falls, Beaver Dam Charter School, Mayville Girl Scout Troop 1261, Lomira Area Jaycees, Tennies Homeschool, Renewal Unlimited, the Bud Cook Family, the Tom Giese Family, Achievers 4-H Club, Lutheran Social Services, and others. 1/18/99

Contaminant Assessment Process (CAP) reports

Fergus Falls Wetland Management District

In conjunction with the Twin Cities Field Office, the Fergus Falls Wetland Management District (WMD) completed four Contaminant Assessment Process (CAP) reports for the following Waterfowl Production Area's: Rabbit River, Mud

Lake, Spink and J.I. Case.
1/18/99

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Task Force Recommends Water Level Reduction in Pool 8

Upper Mississippi River National Wildlife & Fish Refuge

During the last year there have been many discussions about the reduction of water levels in Upper Mississippi River, Pool 8 (La Crosse) to mimic natural summer river conditions. The reduction

would promote aquatic plant growth and dry sediments along the river's edge. A task force of state and federal fish and wildlife managers and scientists, recreational boaters, and commercial navigation interests have been assessing the feasibility of conducting a water level reduction during the summer of 2000. This idea has been discussed and reviewed extensively and it appears to be a viable tool to improve river habitat. One major component of the study is to determine what the maximum level of water reduction should be and how to manage the reduction based on the concerns that have been raised. Considering information gathered from public meetings, commercial and recreational surveys, biological and weather information, the task force recommends using two control points to manage a water level reduction on Pool 8. First, the water level reduction will be minimized in the upper position of Pool 8 so water levels at the La Crosse weather service stage gage would not fall below 4.2 plus or minus, two-tenths of a foot. The second control point for the determination would be Lock and Dam 8 (Genoa, Wis.) where the U.S. Army Corps of Engineers would manage for a maximum reduction of 18 inches. Taking both of these control points into account means the water levels would be reduced during summer months by a maximum of six inches at La Crosse, Wis., and 18 inches at Lock and Dam 8. 1/19/99

Necedah NWR Staff Attends Wisconsin Wildlife Management Training

Necedah National Wildlife Refuge

Necedah NWR staff attended portions of the two-day Wisconsin Department of Natural Resources sponsored Wildlife Management Statewide Training Conference in Eau Claire. The theme for the conference was "Building Skills for the 21st Century." Topics included wetland regulation and biology, grasslands and savannas, forest management, new technology, and wildlife education. This proved to be a good opportunity to network with state natural resource professionals and strengthen partnerships. 1/20/99

Refuge Staff Visit The "Other Cache River"

Cypress Creek National Wildlife Refuge

Cypress Creek Refuge manages lands along the Cache River in southern Illinois. Staff met with White River NWR and Cache River NWR staff over a two day period. Information was shared with management, maintenance, realty and administrative staff. It was a valuable trip for staff to share information on reforestation and wetland management. 1/20/99

Environmental Education - Fergus Falls High School

Fergus Falls Wetland Management District

Jim Piehl gave a presentation on the Prairie Pothole Region to 35 students in the Fergus Falls High School Ecology class. Discussion included waterfowl ecology, predation, private lands programs and careers in

wildlife management. 1/20/99

Refuge Volunteers Honored at Annual Banquet

Upper Mississippi River National Fish and Wildlife Refuge-LaCrosse District

A joint volunteer recognition banquet was held with the Upper Mississippi River National Wildlife and Fish Refuge - La Crosse, La Crosse Fishery Resources Office and La Crosse Fish Health Center to honor the efforts of over 200 volunteers. Nearly 70 volunteers attended the banquet which featured guest speaker Captain Ron Larson. Recognition awards were given to volunteers with total hours were over 4,000 for the three offices. 1/21/99

Fergus Falls Fish and Game Club Create Nesting Boxes

Fergus Falls Wetland Management District

Several staff members from Fergus Falls Wetland Management District along with the Fergus Falls Fish and Game Club helped cut out 350 wood duck boxes and 260 bluebird boxes. Eleven different club members helped as volunteers who tallied about 190 hours drilling holes and assembling the boxes. The wood duck boxes were assembled and will be put out by club members and others within the district. The bluebird houses were cut out and holes drilled, they will be given away as kits to: Greenwings 100, Schools 80, Prairie Wetlands Learning Center 50 and scouts 30. Since 1991 the Service has helped them build 2,366 wood duck and 2,000 bluebird boxes. 1/21/99

Muscatatuck NWR Training Site for Wetland Specialists

Muscatatuck National Wildlife Refuge

Muscatatuck NWR was the site of a Natural Resources Conservation Service wetland plant identification and soils training attended by ten wetland specialists from Indiana, Jan. 21, 1999. 1/21/99

Muscatatuck Restle Unit Study Conducted

Muscatatuck National Wildlife Refuge

Muscatatuck NWR and three Indiana University students summarized all Restle Unit data and conducted a wetland delineation and wildlife project this fall. The report completed in January 1999, summarized the historical knowledge, wetland delineation, and wildlife records for the unit. Eighty-one bird species (including seven state-threatened species), eight herptofauna, and six mammal species were confirmed using the unit by this report. Management recommendations were made by the students as part of the requirement of the approved research proposal. 1/21/99

Second Annual Wild Game Dinner Smashing Success

Minnesota Valley National Wildlife Refuge

Nearly 50 people either directly or indirectly involved with the waterfowl hunting programs met at Minnesota Valley National Wildlife Refuge Visitor Center to enjoy a fine wild game gourmet meal and celebrated the success of the programs and recognized efforts of those that made it happen. Partner include: Minnesota Waterfowl Associa-

tion, Minnesota Duck and Goose Caller Association, Capable Partners, Burger Brothers Sporting Goods, Inc. 1/23/99

Volunteers Help Restore Savanna

Necedah National Wildlife Refuge

On Saturday, Jan. 23, 1999, 34 people braved horrible winter weather to turn out at Necedah NWR to recreate habitat for many disappearing species. The group watched a slide show on savanna habitat, its value to our state, and the restoration process in progress at Necedah. Then they headed outdoors for a safety orientation and equipment briefing. The volunteers then participated in burning slash piles to remove logging debris. The mission of the day was to reduce fuel loads for spring prescription burning, educate visitors, and enjoy being out on the refuge. The Friends of Necedah NWR, Inc., provided cocoa, hot dogs, and marshmallows for the group's lunch. Attendees included a cub scout troop and members of the University of Wisconsin-Stevens Point Fire Crew. A total of 131 volunteer hours were donated during the event. The Refuge plans to repeat the activity in March, when the weather may be more cooperative. Partners include: Friends of Necedah, University of Wisconsin-Stevens Point Fire Crew, Cub Scouts, other volunteers 1/23/99

Mingo NWR Staff Survive Managed Deer Hunt

Mingo National Wildlife Refuge

The staff of Mingo NWR are happy to have completed another Managed Deer hunt on the refuge. Administration of the hunt is accomplished by the Missouri Department of Conservation. The hunt is open to muzzleloaders only by special permit. An ice storm the day before the first hunt (Jan. 9-10) left most of the refuge roads closed to vehicle travel and most of the hunters were restricted to a small portion of the open hunting area. Then, the day before the second hunt (Jan. 23-24) the Mingo area received 8.1 inches of rainfall, again closing many of the roads to flooding. The refuge road system received considerable damage from the flooding. All total, 56 deer were taken by approximately 250 hunters during the two hunts. Partners include: Missouri Department of Conservation. 1/24/99

West Salem High School Class Participates in Wolf Tracking

Necedah National Wildlife Refuge

On Jan. 26, 1999, 26 students and chaperones from the West Salem High School participated in a wolf tracking experience on the Necedah NWR along with Wisconsin Department of Natural Resources (DNR) Biologist Dick Thiel. Numerous tracks have been located on the refuge previously and they are attempting to gain further information with the help of volunteers. The group was also given a demonstration

at the refuge headquarters on endangered and/or threatened species, including the massasauga rattlesnake by Refuge Biologist King. 1/26/98

Environmental Education at Fergus Falls School

Fergus Falls Wetland Management District

Chuck Vuconich, Fergus Falls Wetland Management District, talked to approximately 80 students from three first grade classes at the Fergus Falls Elementary School. They talked about predators, birds and food habits of animals. 1/26/99

Youth Deer Hunts on Ottawa NWR

Ottawa National Wildlife Refuge

On Jan. 2, and Jan. 16, 1999 two youth primitive hunts were conducted on the Ottawa and Navarre Division of Ottawa NWR. Sixteen youth on Ottawa used shotguns and harvested five deer; four bucks and one doe. The success rate for the two days was 34 percent and 29 percent respectively. Six youth hunted the Navarre Division using muzzleloaders only. Although no youth harvested deer on Navarre, all who participated enjoyed the primitive experience. Severe snow storms hampered all hunt efforts. 1/26/99

Adult Deer Hunts on Ottawa NWR

Ottawa National Wildlife Refuge

On Jan. 6-9, 1999 two adult primitive hunts were conducted on the Ottawa and Navarre Divisions of Ottawa NWR. Ninety-seven adults hunted using muzzleloaders and harvested a total of 51 deer; 32

does and 19 bucks. The overall success rate for the Ottawa Division was 35 percent and 56 percent for the never before hunted Navarre Division. All who participated enjoyed the primitive hunt experience and the opportunity to hunt on Ottawa NWR. Severe snow storms throughout January hampered all hunt efforts. Harvest goals were not met, but some effects are anticipated. 1/26/99

Necedah Staff Attends Wisconsin Inter-Agency Conference Necedah National Wildlife Refuge

Central Wisconsin land managers met on Feb. 27, 1999 in Mauston for an annual session to share strategies for addressing local resource problems and opportunities. Twenty agencies from Adams and Juneau Counties were represented. Topics included new wind and watershed projects, county-wide development planning and cost-shared land stewardship programs for private landowners. 1/27/99

Memorandum of Understanding Signed with MWA, NRCS, and Service in Minnesota

Minnesota Private Lands Officer

Minnesota State Coordinator Lance Kuester spearheaded a Memorandum of Understanding (MOU) with Minnesota Waterfowl Association (MWA) and the Natural Resources Conservation Service (NRCS) to facilitate an expanded level of technical and financial assistance for implementation of Conservation Reserve Program (CRP) sign-up. The Service and NRCS

will actively promote U.S. Department of Agriculture (USDA) cost-shared wetland restoration on CRP lands, will provide wetland restoration technical assistance and will review engineering design and construction adequacy. The MWA will fund all or a significant portion of the wetland restoration costs that remain after USDA cost-share and landowner incentive payments. Development of the MOU is responsive to recent policy changes in the Partners for Fish and Wildlife Program yet defines a level of involvement by encouraging wetland restoration on CRP lands through other funding sources. 1/27/99

Migratory Birds and Endangered Species Gain Ground Through Diverse Partnership Patoka River National Wildlife Refuge

On January 27, 1999, after two years of coordination with a diverse group of Partners of the Southwest Indiana 4 Rivers Project Committee of the North American Waterfowl Management Plan, the U.S. Fish and Wildlife Service received title to 463.2 acres of prior converted wetlands in the Wabash River Bottoms of western Gibson County, Indiana. Acquisition and restoration funds all came from grants, easement programs and private donations. 1/27/99

Morris WMD Staff Judge Morris School Science Fair
Morris Wetland Management District

On Jan. 7, 1999, Morris Wetland Management District staff members (Wayne Henderson, Judy Goulet, Darrell Haugen, and Kenton Moos) spent 4.5

hours at Morris Area High School Annual Science Fair. They interviewed 200 students (170 projects) and evaluated their projects to see if would advance to regional competition. Partners include: Morris Area High School, U.S. Department of Agriculture, University of Minnesota Morris Experiment Station, University of Minnesota-Morris 1/27/99

Wildlife Film Festival at Sherburne NWR

Sherburne National Wildlife Refuge

Over 100 people attended the 3 evenings of the Wildlife Film Festival held on January 14, 21 and 28 at Sherburne NWR. Each evening of films covered a wide variety of information on wildlife and habitat common to the Refuge. Topics included sandhill cranes, oak savanna, hawks, owls, deer and general wetland and upland wildlife. Four volunteers coordinated set-up and refreshments. 1/28/99

Eagle Days Activities

Mark Twain National Wildlife Refuge, Annada District

Carolyn Gregory and Alan Lagemann attended eagle day activities in Clarksville, MO., to celebrate the comeback of the bald eagle. The Refuge staff provided spotting scopes for 800 students visiting from area schools. 1/29/99

Necedah NWR Helps Scout Achieve Bear Badge

Necedah National Wildlife Refuge

Brandon Scarbrough, from Manhattan, Ill., met with Refuge Employee Clerk Rabuck and gathered information on the Necedah Refuge. Part of the

requirements for the badge was to conduct an interview, gather materials and uncover the history of a chosen area. Brandon chose Necedah NWR because of his familiarity with it. The Scarbrough family own property in the area and they often take trips through the refuge to view wildlife. 1/30/99

Contaminant Assessment Process (CAP) reports

Fergus Falls Wetland Management District

In conjunction with the Twin Cities Field Office, the Fergus Falls Wetland Management District (WMD) completed four Contaminant Assessment Process (CAP) reports for the following Waterfowl Production Area's: Rabbit River, Mud Lake, Spink and J.I. Case. 1/30/99

Necedah NWR Holds Tracking Workshop

Necedah National Wildlife Refuge

On Jan. 30, 1999, 13 people attended a winter wildlife tracking workshop. Taught by Refuge volunteer Terry Gerrigan, the workshop provided an orientation to animal gaits, tracking patterns and habits. After an indoor discussion, the participants went out on the refuge to put their new skills to the test. Refuge wildlife cooperated and provided several excellent track samples. 1/30/99

Reduced Grazing Allows Habitat Improvements

Crab Orchard National Wildlife Refuge

During the period 1990-1998 habitat improvements were made by converting 792 Refuge acres from pasture land to either

forest habitat or enhanced grassland habitat. In addition, approximately 15 miles of livestock fence was removed by volunteers. Five hundred twenty-five acres of this low quality pasture land was converted to native grasses and legumes which provide desirable food and cover for migratory birds and indigenous wildlife. As part of an ongoing effort to reduce forest habitat fragmentation, another 267 acres were planted with native hardwood tree seedlings. Planting was accomplished by Refuge staff and volunteers, with seedlings contributed by Illinois Department of Conservation. Herbicide application and clover seed for site preparation, as well as additional tree seedlings, were purchased with funds contributed by several partners. Partners include: Illinois Department of Conservation, National Fish & Wildlife Foundation, Wildlife Forever, Quail Unlimited Inc., Olin Corporation, Phoenix Audubon Society, Sierra Club, Shawnee Group, Friends of Crab Orchard 1/30/99

River Otters Released at Jefferson Proving Ground

Muscatatuck National Wildlife Refuge-Jefferson Proving Ground

The staff at Jefferson Proving Ground (JPG) assisted Indiana Department of Natural Resources, Division of Wildlife personnel in the release of six additional river otters at JPG on Jan. 31. A total of four males and two females were released to supplement an earlier release at JPG; 25 river otters were first returned to

the faunal community of JPG in January 1996. Biologists with the Division of Wildlife have released 303 otters into Indiana watersheds since the program began in 1995. Division of Wildlife biologists picked up the otters in Louisiana and transported them to Purdue University where they received vaccinations and physical exams. During the exam, one of the female otters was confirmed to be pregnant. Since the first otter release, otters have been sighted at several locations on JPG. Partners include: Indiana Department of Natural Resources, Division of Wildlife. 1/31/99

Mammals of the Canadian Rockies

Shiawassee National Wildlife Refuge
Green Point Environmental Learning Center hosted its First Wednesday Discovery Series Program on Feb. 3, 1999. This month's program featured a slide presentation by local nature photographer, Myles Willard. The show featured his recent excursion into the untamed beauty of Canada's Banff and Jasper National Parks and Montana's Glacier National Park. Fifty people enjoyed his stories as they viewed images from elk and mountain goats to black bears and grizzlies. 2/3/99

Cost-share Program Thrives on Partnerships

Private Lands
Habitat-oriented projects will restore approximately 600 acres of wetlands and nearly 2,800 acres of associated uplands,

predominantly grasslands, on private and public lands. Twenty-eight projects will improve recreational fishing opportunities on national wildlife refuges. Many projects will provide public outreach, public recreation and new or enhanced accessibility features to accommodate physically challenged persons who visit the National Wildlife Refuge System. The Service's Regional expenditure for 148 projects is \$545,000, or \$3,682 per project. Partners are contributing approximately \$2,100,000 of matching funds, or \$13,896 per project. The Partner:Service cost-share ratio is 79:21. 2/1/99

West Otter Tail Crop and Forage Show

Fergus Falls Wetland Management District
Chuck Vuconich and Jim Piehl, Fergus Falls Wetland Management District, participated in the "West Otter Tail Crop and Forage Show" in Fergus Falls. They coordinated with Future Farmers of America (FFA) advisors from seven schools to put together and score contestants in a wildlife contest consisting of a 25-question written test and 48-question identification test of insects, fish, birds and mammals. Approximately 60 students took the test. The crop and forage show was attended by about 600 area producers and interested individuals. This was the 26th year of the show. Numerous seed companies, agricultural chemical and other representatives were there. 2/3/99

Necedah NWR Interviewed Regarding Whooping Crane Study

Necedah National Wildlife Refuge

Phil Cianciola from Milwaukee radio station, WTMJ, called Necedah NWR on Feb. 24, in regards to a news release from state Senator Kevin Shibilsky which announced that Necedah NWR was chosen as a release site for the reintroduction of whooping cranes into Wisconsin. A short interview was conducted during which it was explained that a Whooping Crane Recovery Team was examining a number of sites in Wisconsin and elsewhere in the Midwest as possible release sites. Habitat was being examined for nesting and brood rearing as part of the Ecological Assessment that the Team was preparing. It was explained that Necedah NWR and other public lands in Central Wisconsin had played an important role in the recovery of the sandhill crane populations in Wisconsin, and that similar success would be anticipated with whooping cranes in the hopes of bringing this magnificent bird back to Wisconsin for future generations to enjoy. Partners include: Wisconsin Department of Natural Resources, International Crane Foundation 2/4/99

800 Attend Winter Fun Day at Sherburne NWR

Sherburne National Wildlife Refuge

Over 800 visitors and Regional Director Bill Hartwig attended the 5th annual Winter Fun Day at Sherburne NWR held Saturday, Feb. 6. This family-oriented event provided both youth

and adults the opportunity to enjoy low impact winter outdoor recreational activities, learn about the adaptations of wildlife and plants to winter, and celebrate the 96th birthday of the National Wildlife Refuge System. Visitors were able to try out snowshoeing, cross country skiing, and skijoring, many for the first time. Volunteer wildlife interpreters provided interpretive information on the oak savanna and wetland habitats on the refuge for all participants in the horse drawn sleigh ride. The feature presentation on dog sledding drew over 225 and was followed by a drawing for 10 free dog sled rides. Other activities included demonstrations on winter camping and ice fishing, talks on wildlife in winter and winter bird feeding, kid's crafts and face painting. The day ended with a candlelight ski and bonfire at Sand Dunes State Forest which drew over 135 skiers. The event was co-sponsored by the refuge and the Friends of Sherburne and made possible with assistance from 65 Refuge volunteers and seven local businesses. Partners include: Friends of Sherburne NWR, Minnesota Department of Natural Resources - Forestry (Sand Dunes State Forest); Hennepin Parks (Eastman Nature Center); Fitzharris Ski and Sports; Wild Bird Crossing; REI, and 4-H. 2/6/99

Snowfest a Success at Seney NWR

Seney National Wildlife Refuge
A brisk wind didn't deter over 300 visitors from participating in Seney NWR's Snowfest on February 6. Visitors took advantage of guided tours of

Refuge cross-country ski trails, raced snowsnakes, took horse-drawn sleigh rides, made wildlife snowflakes, vied for prizes in a mystery track game, watched a puppet show and movies, and checked out snowshoes for use on the trails and in a race. Racers competed in four age categories; the youngest participant was four years old and the oldest was 79 years young! Partners: Seney Natural History Association - contributed funds for supplies; Northland Outfitters - contributed use of cross-country skis free of charge; Iverson's Snowshoes - contributed use of snowshoes and display free of charge. 2/6/99

Helicopter Wolf Captures on Agassiz NWR

Agassiz National Wildlife Refuge

On February 4, 5, and 6, a helicopter crew was on site to capture and radio collar wolves for the final year of a three year research project on Agassiz Refuge. Andreas Chavez, SCEP-MS student, and Eric Gese, Utah State University, were on site to direct and assist with the capture. Only four of the five wolves from the Golden Valley Pack were captured. The alpha female that was not captured had been previously collared. The alpha male was captured and collared. This animal had been captured last year, but his collar had been chewed off. The remaining three wolves were female pups. Extensive searches had been conducted from the air and ground to locate more wolves at Agassiz NWR and Thief Lake Wildlife Management Area. None were

found. There had been two collared animals in the Elm Lake Pack, but both had died from mange, prior to the helicopter arriving. Other members in the pack had been observed with mange this past summer. It is assumed they may have died as well. One set of tracks was observed in the Elm Lake area. It is unknown if this animal was a sole survivor of the original Elm Lake Pack, a visitor from the Golden Valley Pack, or a disperser from another area. 2/6/99

Youth Habitat Day in Alexandria

Fergus Falls Wetland Management District

Jim Piehl, Fergus Falls Wetland Management District, set-up and tended a booth at the West Central Minnesota Youth Habitat Day in the Viking Mall, Alexandria, Minn. The goal of the event was to promote cooperative adult and youth involvement in habitat conservation and environmental education. Approximately 3,000 people toured the 25 exhibits, talking with exhibitors and picking up pamphlets, calendars, posters and other educational materials. They also built woodduck and bluebird houses to take home. Partners: Douglas Soil and Water Conservation, Minnesota Department of Natural Resources, Minnesota Deer Hunters Association, National Wild Turkey Federation, Woodduck Society, Department of Natural Resources Conservation Officers, Prairie Land Management, Lake Carlos Environmental Center, Minne-

sota Trappers Association, University of Minnesota Raptor Center, Douglas County Land Resources Management, Douglas County Lake Association, Viking Sportsmen, Ducks Unlimited, Loon Nesting Platforms, Pioneer Heritage Conservation Trust, Minnesota Waterfowl Association, The Bluebird Society and the Minnesota Pollution Control Agency. 2/6/99

Mingo NWR Holds Eagle Days Events

Mingo National Wildlife Refuge

Approximately 1,300 attended an "Eagle Days" Program and events held at Mingo NWR. The Mingo visitor center contained multiple special exhibits on eagle biology, history, and conservation, as well as several different eagle videos. A special program was conducted by the Dickerson Park Zoo (Springfield, Mo.) that featured Phoenix, a 10 year old bald eagle who has become the Ambassador to the species in Missouri. Scopes were attended at Duck Creek Conservation Area and visitors were able to watch a pair of live eagles in the wild. The eagles put on a great show as they were building onto the existing nest the entire weekend. Also set up were puzzles and a coloring table for the kids. Partners include; Missouri Department of Conservation, Scenic Rivers Audubon Society 2/7/98

Historian Contracting With Refuge

Minnesota Valley National Wildlife Refuge

As part of Minnesota Valley's Comprehensive Conservation Plan process, Anthony Godfrey of U.S. West Research, Inc., delineated the work he and a local subcontractor will produce for the plan. It will consist of three volumes: background, management, and pertinent laws. There will be no field work involved with this project. 2/8/99

Save America's Treasures Grants Applied For

Minnesota Valley National Wildlife Refuge

Refuge staff applied for three grants totaling \$1.3 million to help preserve buildings and sites on the refuge eligible for the National Register. If awarded funding, nomination for the register will be required and matching funds will need to be secured. 2/8/99

Status Report on Polander Lake EMP, Pool 5A

Upper Mississippi River National Wildlife & Fish Refuge

This summer the construction of the second phase of the Polander Lake Environmental Management Plan (EMP) project will begin to complete restoration in the backwater lake using man-made islands. The islands will break up wind and water energy, therefore, creating quiet areas that will start reproducing vegetation. Upper Mississippi River NWR continues to work with the U.S. Army Corps of Engineers to ensure that the islands are constructed with maximum habitat benefits, cost

efficiency, and minimal maintenance in mind. Partners include: Paul District, U.S. Army Corps of Engineers 2/9/99

Horicon NWR Offers Wildlife Trunk to Educators

Horicon National Wildlife Refuge

Horicon NWR invites K-12 educators to borrow the new Wildlife Discovery Trunk. Contents include activity guides, books, compact discs, games, videos, posters, and many other items. Of special note is the Cargo for Conservation, wildlife items confiscated by the Service from the illegal trade in animal parts and products and used to deliver a "buyer beware message". The Wildlife Forever CD-ROM guide serves as the main curriculum guide for the trunk. The Wildlife Trunk was assembled in part by University of Wisconsin-Stevens Point intern Katie Bares. Bares' internship was funded by the Midwest Interpretive Association. 2/11/99

National Wildlife Refuge Week Photo Contest

Upper Mississippi River National Fish and Wildlife Refuge-Winona District

Upper Mississippi River NWR.-Winona District and Trempealeau NWR celebrated National Wildlife Refuge Week by initiating a photo contest highlighting Refuge people, landscapes and wildlife. The Friends of the Upper Mississippi River NWR.-Bob Pohl Chapter agreed to help organize and publicize the event as well as provide awards to participants. Forty-two entries were received by the Jan. 15 deadline.

Three local professional photographers judged the contest. The winning photos were displayed at Winona National Bank, Trempealeau NWR and Upper Mississippi River NWFR.-Winona District. Several participants agreed to allow their photos to be displayed on Refuge kiosks, and in homepages and publications. Partners include Friends of the Upper Mississippi River NWFR and Trempealeau NWR - Bob Pohl Chapter 2/12/99

Region's Biologists Focus on Ecosystem Approach at St. Louis Training Forum

Region 3

Approximately 220 biologists attended "Biology and the Ecosystem Approach: Putting the Pieces Together," a training forum for all biologists in Region 3. The four-day forum was held in February in St. Louis, Mo. Forum topics included trust resource overviews, Program overviews, habitat conservation, research, monitoring and data management, population management, adaptive resource management, and challenges facing biologists. Many biologists gave presentations, all focused on the Ecosystem Approach. Partners include: Missouri Department of Conservation, Colorado State University, Iowa State University. 2/12/99

Partnership Builds Wildlife Observation Deck

Shiawassee National Wildlife Refuge

The Saginaw Bay Watershed Initiative Network (WIN) funded the construction of a 20' x 20' elevated wildlife observa-

tion deck at the Curtis Road parking lot. The deck has a 40' long accessible ramp leading up to it, and overlooks an area of the Refuge which attracts waterfowl and shorebirds. The proximity of the deck to the parking lot will allow its use by many people. The design of the deck was a joint effort between the Regional Office of Engineering and Ducks Unlimited. Ducks Unlimited oversaw management of the construction contract, and Refuge maintenance personnel installed benches on the deck. Partners: Saginaw Bay Watershed Initiative Network (WIN) Foundation, Ducks Unlimited, Inc. 2/12/99

Friends of Necedah NWR Go Cross Country Skiing

Necedah National Wildlife Refuge

On February 13, thirteen community members rented cross country skis from the Friends of Necedah NWR and took to the woods. Despite spring-like conditions, the group learned techniques basic to this winter sport. After an indoor orientation, the group tackled various terrain. Topics for the workshop included equipment types, clothing needed, conquering falls, and different strides used when skiing. OA Clerk Rabuck led the group. 2/13/99

Bluebird Festival in Jackson, Michigan

Michigan Private Lands Office
The Michigan Private Lands Office prepared all display materials for an exhibit at the Bluebird Festival Feb. 13-14, 1999 in Jackson, Mich. East

Lansing Field Office provided the staff. This event included educational talks, displays and art shows and was sponsored by Dalheim Nature Center at Jackson Community College and attracted 2,000-3,000 visitors. 2/14/99

47 Percent of Wood duck Boxes Produce Ducks at Rydell National Wildlife Refuge

Detroit Lakes Wetland Management District

A total of 132 wood duck boxes were available for use by waterfowl on the Rydell National Wildlife Refuge. Of these, wood ducks used 52 boxes for nesting; producing 624 ducklings. Ten boxes were used by hooded mergansers to produce 120 ducklings. Forty-one of the remaining boxes were used by squirrels and one box had a wasp nest. Volunteers help construct a number of the nesting boxes each year to replace the boxes that are no longer useable because they are damaged by weather or deterioration. 2/15/99

Necedah Manager Meets with U.S. Senator Feingold

Necedah National Wildlife Refuge

Necedah NWR Manager Larry Wargowsky was invited and participated in a listening session with U.S. Senator Russell D Feingold on Feb. 15, 1999, in Necedah, Wis. Wargowsky discussed Refuge issues with Congressional Aid Matt Nicholay. Wargowsky met with Senator Feingold at his invitation. 2/15/99

Local Cub Scouts Learn About Bluebirds

Fergus Falls Wetland Management District

Chuck Vukonich from the Fergus Falls Wetland Management District met with eight cub scouts and seven adults to talk about bluebirds and to build bluebird houses. This scout group was from Underwood. 2/16/99

William Hegge Meets with Editor of Madison Press

Reynoldsburg Field Office

William Hegge of the Reynoldsburg Field Office met with Mr. Bill McCullick, editor of the Madison Press to brief him on the Service's proposed Darby Prairie NWR and provide factual information about the project. Rumors and public misperceptions were addressed, with Hegge providing factual information about the proposed Refuge. 2/16/99

Agassiz Moose Population Continues Decline

Agassiz National Wildlife Refuge

Regional Pilot Foster, Refuge Biologist Gary Huschle, ROS Tischer and Tractor Operator VanEps completed the annual moose survey and mid-winter big game survey for Agassiz NWR and surrounding State Wildlife Management Areas. The cumulative results of both surveys indicate the moose population (about 50) has taken another large drop, 40%, from the previous two years. This is very disappointing as we had hoped that the population decline had leveled off at about 70 animals (1996 and 1997 survey results). Previous to

that (1994 and 1995 survey results) we had hope the decline had leveled off at about 100 animals. The three year moose research on declining moose numbers is now in its last year. 2/17/99

Annual Deer Survey Shows Small Signs of Recovery

Agassiz National Wildlife Refuge

On February 17, 1999 the annual mid-winter big game survey was flown by Regional Pilot Foster, Refuge Biologist Huschle and Tractor Operator VanEps. The area included Agassiz NWR and surrounding State Wildlife Management Areas. The deer population was recorded at 54, a 17 percent increase over last year's all-time low record of 432. Last year's mild winter no doubt contributed to this increase. This year's winter has been comparatively mild as well, with no deep snows. The refuge population goal is 1500 to 2000 deer. The deer herd had peaked at 3000 animals in 1992; however two extremely brutal winters, 1995-1996 and 1996-1997, took their toll on deer populations. Deer are the main prey species for resident wolves and also provide hunting opportunities for the general public. Hunting has been limited to bucks only during the last two years. 2/17/99

Muscatatuck NWR Recognizes Job Corp Wetland Restoration

Muscatatuck National Wildlife Refuge

Muscatatuck NWR held an award ceremony and presented a plaque to the Atterbury Job Corp students for their suc-

cessful completion of the 12-acre Endicott Marsh restoration project. Forty people including Job Corp students and administrators, Green Thumb participants, Natural Resources Conservation Service, and Muscatatuck NWR staff attended. This restoration provided 2,400 hours of real, on-the-job, training to the students and enabled the refuge to complete a needed restoration. Refreshments and a tour of the refuge were provided. Partners: Atterbury Job Corp, Natural Resources Conservation Service, Green Thumb. 2/17/99

Horicon NWR Hosts Friends and Neighbors Gathering

Horicon National Wildlife Refuge

Fifty friends and neighbors attended a chili dinner, funded by Midwest Interpretive Association, and Program provided by Horicon NWR staff. Refuge staff recapped the accomplishments of 1998 and provided a sneak preview of 1999 activities. This annual event was well-received and many positive comments were heard. 2/18/99

Warbler Nests Monitored at Muscatatuck NWR

Muscatatuck National Wildlife Refuge

Muscatatuck NWR received preliminary reports on 1998 research projects being done by Indiana University students on prothonotary warblers behavioral patterns. Fifteen nests were monitored that fledged 54 prothonotary warblers and two brown headed cowbirds. As part of an exten-

sive study of avian habitat relationships in bottomland forests in Southern Indiana, University students conducted fixed radius circular plot point counts at 11 census points in June on the refuge. Most abundant birds in 1998 were prothonotary warbler, northern cardinal, blue-gray gnat-catcher, red-eyed Vireo, red-bellied woodpecker, and eastern wood-pewee. Another field season is scheduled for 1999. 2/18/99

Muscatatuck NWR Finds Increased Population of Rare Orchid

Muscatatuck National Wildlife Refuge

Muscatatuck NWR volunteer botanist Lowry summarized all existing data from the Muscatatuck Seep Spring-Research Natural Area (MSS-RNA) and added his 1998 field season results on the state listed Southern Tuberled Orchid as well as other plants. An increase in the two known populations of this rare orchid has been documented and 21 new species of plants were documented in the MSS-RNA. 2/18/99

DeSoto Refuge Staff Previews New Video

DeSoto National Wildlife Refuge
DeSoto NWR previewed a 27-minute video about the refuge, broadcast nationwide in December as part of the TV series "Nature Scene" with Naturalist Rudy Mancke. Rudy and co-host Jim Welch did an excellent job of interpreting the subtle aspects of natural history at the refuge. Topics includes Lewis and Clark

Expedition, the Missouri River environment, and difficulty of early navigation. Rudy demonstrates a good appreciation and understanding of the Service Mission. Fieldwork was carried out in August 1998. Coordinated by ORP Bruce Weber. This is a Program of South Carolina ETV. 2/19/99

Pheasants Forever Assists Partners for Fish and Wildlife Habitat Restoration Project *Litchfield Wetland Management District*

Through the cooperation of the Farm Services Agency and a \$1,000 contribution from Pheasants Forever, the Service Partners for Fish and Wildlife Program constructed 18 earthen dams, reestablishing 16 wetlands totaling over 40 acres, on the Grant Johnson Farm in Stearns County. The basins will be shrouded by more than 60 acres of perennial grasses and trees planted this spring through the Conservation Reserve Program (CRP). This habitat venture is a tremendous benefit for migratory birds, resident wildlife, and water quality within the Sauk River Watershed. Thanks to strong partner support, over 100 wetlands were restored in Stearns County last calendar year. 2/19/99

Accessibility Issues Examined at Necedah NWR

Necedah National Wildlife Refuge

On February 20, 1999, Refuge staff met with a disabled visitor and a representative from the Illinois Department of Natural Resources to discuss

the accessibility of refuge facilities. A tour of current structures was given and included a fishing pier, trail heads, observation decks and tower, and a look at trail surfaces on site. Several suggestions were made and taken under advisement including: leveling existing trail surfaces, adding accessibility text to refuge literature, correcting access ramps to decks and improvements to trails through wet areas. The group plans to get together again in April to examine plans for a new fishing pier and to look at the accessible duck blind as well as option for maneuvering on the current trails. 2/20/99

Savanna Saved at Necedah NWR

Necedah National Wildlife Refuge

On February 20, 1999, 13 community members attended a savanna slide show and safety orientation before heading out onto the refuge to aid in restoration work on a savanna unit. Education included the history of savannas, their importance and facts on the biodiversity found in them. The volunteers burned off slash piles left after logging operations removed selected trees from the unit. A prescribed burn will take place on the unit later in the spring. Lunch was provided to participants by the Friends of Necedah NWR. 2/20/99

Quail Unlimited Holds Work-day at Muscatatuck NWR Upland Restoration Area

Muscatatuck National Wildlife Refuge

Muscatatuck NWR was the site of a Muscatatuck Quail Unlimited work-day on February 20, 1999. Six people worked a total of 41 hours on the 40 acre upland habitat restoration area. This area has been managed in partnership with the refuge since 1995. 2/20/99

Minnesota Valley NWR Restores 47 Basins in First Quarter

Minnesota Valley National Wildlife Refuge

Partners contributed approximately one half of the funds needed to restore and enhance more than 436 acres of critical waterfowl habitat on 25 sites located on private lands and refuge lands within the Minnesota Valley Wetland Management District. 2/22/99

Outreach: Minnesota Moose Mystery, Agassiz NWR

Agassiz National Wildlife Refuge

Gary Huschle and Margaret Anderson were interviewed and reviewed final text for writer Rhonda Donald, Brown Tabby Writing Service. Ms. Donald is contracted by the National Wildlife Federation to write articles for Target Stores' "EarthSavers" newsletter. Ms. Donald picked up on the Adopt-A-Moose Program from the website. The article is scheduled for June. Writer Bill Silliker, Jr. completed his book on moose. He spent time at Agassiz in 1997 photograph-

ing moose captures and collecting information for his book. The refuge is referenced in text and photos. 2/23/99

Upper Mississippi River NWFR Law Enforcement Coordination Meeting

Upper Mississippi River National Wildlife and Fish Refuge

A two day law enforcement coordination meeting was facilitated by Park Ranger Lescalleet for the law enforcement officers on the Upper Mississippi River NW&FR and the Trempealeau Refuge. The purpose of this meeting was to review procedures, discuss authorities and jurisdictions, and move towards standardizing refuge enforcement efforts. Bob Bartels, R3 Law Enforcement Coordinator, and Gary Jagodzinski, Special Agent from the Onalaska Law Enforcement Field Office, attended and contributed to the meeting. 2/23/99

Necedah NWR Contacted by Newspaper on Junior Duck Stamp

Necedah National Wildlife Refuge

Necedah NWR staff was contacted regarding the upcoming Federal Junior Duck Stamp contest. The judging will take place on March 24, the writer wanted background information before covering the event. 2/23/98

Darby Partners Meet and Hear from Refuge Opposition

Reynoldsburg Field Office

The Darby Partners met to discuss several issues, but primarily the TOLUC Rule,

and also heard from the organized opposition to the proposed Darby Prairie NWR. William Hegge provided an update about the refuge and answered questions. Over 100 people were in attendance. Normally, only 30-35 representatives attend the meetings. Hegge also made a presentation to 30 members of the local Wheaton Club about the proposed Darby Prairie NWR. The Club is supportive of the Service's proposal 2/24/99

Necedah NWR Interviewed by Country Living Magazine

Necedah National Wildlife Refuge

As a result of increased publicity from news release distribution, a Country Living magazine feature writer contacted the refuge for background and current event information and another request was made by their graphics department for slides for illustrating this article. 2/24/99

Refuge Initiates Communication with Local Hotels

Minnesota Valley National Wildlife Refuge

Minnesota Valley NWR is an urban refuge surrounded by the tourism industry. It is five minutes away from the Minneapolis/St. Paul International Airport and many hotels are near the Visitor Center. The refuge wants to encourage the hotel guests to become better acquainted with our mission and our facility. The refuge intends to develop a communication plan in 1999 with at least four of the nearby hotels. The nearby Hilton hotel represents the first of these initia-

tives. 2/24/99

Muscatatuck NWR Repairs Auto Tour Route

Muscatatuck National Wildlife Refuge

Muscatatuck NWR maintenance replaced a broken 24 inch culvert on the Auto Tour route to allow for safer public use on February 24, 1999. Partners: Green Thumb. 2/24/99

Society of Range Management Visits DeSoto NWR

DeSoto National Wildlife Refuge

Muscatatuck River Basin in WRP Acreage Increases

Muscatatuck National Wildlife Refuge

Muscatatuck NWR continues to work off the refuge to encourage Wetland Reserve Program (WRP) and Partners for Fish and Wildlife Programs. In February, one WRP site of 57 acres was field checked, four previously checked WRP sites received tentative funding from the Natural Resources Conservation Service (64 acres), and one potential Partners for Fish and Wildlife Program site was field checked. Partners: Natural Resources Conservation Service 2/25/99

Necedah NWR Interviewed by Wisconsin Trails

Necedah National Wildlife Refuge

As a result of increased publicity from news release distribution, a Wisconsin Trails magazine feature writer contacted the refuge for information on the Karner blue butterfly and on refuge trails and activities. Slides of the Karner blue butterfly were also provided to

their graphics department for illustrating the article. 2/25/99

Recruiting at Saginaw County Summer Youth Job Fair

Shiawassee National Wildlife Refuge

Shiawassee NWR is recruiting for one person to serve as crew leader for our 1999 YCC Program. Richard McAvinchey has begun recruiting for this person, including attendance at the Saginaw County Summer Youth Job Fair, on February 25, 1999, at Ruben Daniels Community High School. The 300-plus young people who attended were required to bring resumes. Most were in high school. At least 14 people asked what the Refuge was looking for, three people left resumes and took vacancy information and OF 612 application forms. Richard also contacted Teresa Stitt, admissions representative for Delta College, and discussed Service recruiting interests. 2/25/99

Volunteer of the Year Recognized

Upper Mississippi River National Wildlife & Fish Refuge

The McGregor District of the Upper Mississippi River National Wildlife and Fish Refuge recently recognized their volunteer of the year, Tom Sandersfeld from Elkader, Iowa. Mr. Sandersfeld was awarded a plaque at a luncheon held in Elkader on February 26. His name was also engraved on a plaque displayed in the District's Visitor Contact Station. Mr. Sandersfeld conducted frog and toad surveys for the district. Comple-

tions of the surveys would not have been possible without his help. The surveys are done at night by listening to frog and toad calls and recording an index of abundance. The district truly appreciated the odd hours that Mr. Sandersfeld worked to accomplish the surveys. 2/26/99

Detroit Lakes Wetland Management District Staffs Booth at Volunteer Fair

Detroit Lakes Wetland Management District

A booth on volunteer opportunities available at the Detroit Lakes Wetland Management District was staffed during the annual Detroit Lakes Volunteer Expo on February 27. An estimated 500 people visited the Expo and viewed the displays. Several people expressed interest in volunteering on the District. 2/27/99

Landscape Fair at Minnesota Valley NWR Draws a Crowd

Minnesota Valley National Wildlife Refuge

The general public was invited to walk through the many displays set-up by various landscape designers, lawn care services and by organizations such as the Native Plant Society. Master Gardeners were on hand to provide growing tips. In addition three special workshops were held: 1) creating backyard prairies, 2) establishing woodland gardens, and 3) native plant identification. The workshops were videotaped by Bloomington Cable TV and by KSTP television. 2/27/99

Spring Waterfowl Migration *Squaw Creek National Wildlife Refuge*

The peak concentration of snow geese this spring was more than 220,000 birds recorded on February 25. This was the highest since February 1972 when 220,800 were counted. In addition, Canada goose numbers were the highest in five years. As for ducks, the peak numbers of birds was nearly one month ahead of normal with 24,500 counted on February 16. 3/1/99

Squaw Creek NWR Bald Eagles *Squaw Creek National Wildlife Refuge*

Two bald eagles have taken up residence in Mallard Marsh, constructed a nest during the late winter and early spring and appear to be serious nesters. The new nest is approximately 100 yards east of a nest built in 1997 (the first ever on Squaw Creek which successfully fledged three young during 1997). 3/1/99

Squaw Creek Comprehensive Conservation Plan *Squaw Creek National Wildlife Refuge*

A shareholders meeting was held at the Drury Inn, St. Joseph, Mo, Mar. 12, 1999. Fifteen of 30 people that were invited attended and provided some input into the process. Two public meetings will be scheduled this summer. Three University of Missouri students, under contract with the Service, spent March 24 and 25 with a Global Positioning System (GPS) unit plotting physical facilities for a refuge map to be included with the Comprehensive Conservation Plan. 3/1/99

New Squaw Creek Storage Building *Squaw Creek National Wildlife Refuge*

A new 40' x 80' storage building was completed in early January. A concrete floor will be poured when weather conditions permit and water troughs and downspouts installed. 3/1/99

Diversity Outreach *Squaw Creek National Wildlife Refuge*

Resumes from five potential candidates from Missouri Western State College were solicited and assistance was given to them in getting on the Biological Tech/Aid registers for possible summer jobs with the Service. Contact was also made with the Cooperative Wildlife Research Unit, Columbia, Mo., and Haskell Indian Nations University, Lawrence, Kan. 3/1/99

Outreach: Status of Elm Lake Wolf Pack, Agassiz NWR *Agassiz National Wildlife Refuge*

Refuge staff provided interviews to the Grand Forks Herald, Brainerd Dispatch and Associated Press, and one radio interview, KKCQ17.1, Fosston, Minn., regarding the status of the wolf research. Of specific interest was the fatal outcome of two radio collared wolves from the Elm Lake Pack that died from mange. Also, it appears that all members of this pack may be dead. During a recent helicopter capture attempt, only tracks of one animal were found in the area. This could be a pack survivor,

an animal from a neighboring pack or a dispersed animal from another area. From a scientific standpoint, the documentation of death by mange was significant. There are very few documented cases of mange causing death. 3/1/99

Necedah NWR Contacted by Discover Wisconsin TV Show *Necedah National Wildlife Refuge*

Necedah NWR was contacted by writer Brett Kosmider of the "Discover Wisconsin" television program. Mr. Kosmider was gathering background information on the Refuge for an upcoming broadcast covering Juneau County. His intent is to feature the Necedah NWR as a major portion of the program. 3/1/99

Muscatatuck NWR Volunteers Outreach *Muscatatuck National Wildlife Refuge*

Muscatatuck NWR volunteers manned booths and showed Service exhibits/materials at the Hoosier Association of Science Teachers and Indiana Ducks Unlimited Conference in February. Approximately 2,500 people were exposed with the Service and refuge system message. 3/2/99

Service Exhibits at Indiana Wildlife Society Meeting *Muscatatuck National Wildlife Refuge*

Service staff took exhibits on the National Wildlife Refuge System and the trumpeter swan reintroduction program to the Indiana Wildlife Society Meeting where the exhibits were viewed by several hundred people. 3/2/99

Eagle Sent to Repository After Being Hit By Car Near Detroit Lakes WMD

Detroit Lakes Wetland Management District

On March 2, 1999, Refuge staff received a report of an eagle being injured after being hit by a car in the vicinity of Floyd Lake near Detroit Lakes, Minn. Wildlife Biologist Les Peterson located the injured adult bald eagle, which was seriously traumatized and could not fly or walk. The bird died before it could be transported to the Raptor Center. The bird's body was sent to the Eagle Repository in Colorado for disposition. 3/2/99

Great Grizzlies!

Shiawassee National Wildlife Refuge

Green Point Environmental Learning Center hosted its monthly First Wednesday Discovery Series Program on March 3, 1999. This month's topic, "Great Grizzlies!" Visitors watched the film, "Peacock's War," which follows the struggles of Michigan native Doug Peacock to document and save the last grizzly bears of the continental United States. Thirty-three people attended the program. 3/3/99

Horicon NWR Host Meeting for Fox River NWR

Horicon National Wildlife Refuge

Horicon NWR hosted a successful meeting at Fox River NWR on March 4, 1999. The purpose of the meeting was for neighbors and other interested people to provide input on the Fox River NWR, especially regarding the current hunting

program. About 30 people attended and about 11 people responded with comments by mail, phone and fax. The meeting was a success, although the opinions ran from one extreme to the other. However, the people were heard and that was appreciated. An annual meeting will be held every year. Refuge staff will discuss the need for any changes to the refuge and will then inform all those who attended. 3/4/99

Annual Congressional Staff Visits

Agassiz National Wildlife Refuge

On February 24, 1999, Margaret Anderson visited with Mark Anderson of Senator Wellstone's St. Paul, Minn. Office to bring him up-to-date on refuge events, issues. Moose, wolves, flooding, and flood easements by watershed districts were discussed. Refuge Manager Anderson also stopped in to leave additional information for Maynard Pick, Congressman Peterson's Water Representative, Waite Park, Minn. Mr. Pick was out, but Anderson had discussed issues listed above at the MNTWS annual meeting on February 4. All Congressional staff people in the district have been placed on the MNTWS mailing list. This year's theme was "Partnering," and Mr. Pick was interested to see how this might apply in Red River Basin. On March 3, 1999, Anderson contacted, by phone, Deb Hams, Congressman Peterson's field rep in Red Lake Falls, regarding a possible meeting on March 4. Due to inclement weather, Anderson was unable to get to the

office when Ms. Hams was int. Another meeting will be scheduled. Senator Grams office will be scheduled with next meeting in Regional Office. 3/4/99

Service Gives Presentation to Minnesota Conservation Corps

Litchfield Wetland Management District

On March 4, 1999, Refuge staffer Steve Erickson gave three presentations to eighty new recruits of the Minnesota Conservation Corps (MCC). The MCC is a seasonal education/work experience program of the Minnesota Department of Natural Resources for young adults who are interested in careers in the field of natural resources. Invited to speak as part of a "careers workshop" segment of a week-long orientation and training session for the new recruits, Erickson gave information about the Service including its history, structure, responsibilities, activities, programs and career opportunities. The Student Career Experience and Student Temporary Employment Programs were highlighted. The MCC orientation was held at the YMCA's Camp Ihdihopi near Loretto, Minn. 3/4/99

150 Seventh Graders Experience Winter Life at Prairie Wetlands Learning Center

One-hundred and fifty seventh graders from area schools learned about winters on the prairie during a day at the Prairie Wetlands Learning Center March 5, 1999. Three

groups of fifty students toured the building, drilled holes in the ice to sample pond water under microscopes, and examined the ground in the Oak Savanna for animal tracks. 3/5/99

Fee Hunting Workshop

Illinois River NW&FR

Refuge Manager Adams and Assistant Manager Fisher participated in a Fee Hunting Workshop sponsored by the Prairie Hills RC&D. They provided information on the Service Private Lands Program, as well as information on restoring grassland and forest habitat. Approximately 50 people attended the Workshop. 3/5/99

Northern Tallgrass Prairie Bird Point Count Inventory

Fergus Falls Wetland Management District

The Fergus Falls Northern Tallgrass Prairie Bird Point Count numbers for 1998 have been tallied. This survey has been done for the past six years to document the abundance and diversity of bird species associated with the northern tallgrass prairie of western Minnesota. Thirteen separate fields of native tallgrass prairie found on Waterfowl Production Areas (WPA) and The Nature Conservancy property ranging in size from 30 to 320 acres were surveyed in 1998. Sixty-five species were observed. As with other years, savannah sparrows and bobolinks were the most common species on the large prairie tracts. Sedge wren numbers remained about the same. LeConte's sparrows seemed more numerous than ever, possibly due to the wet-

ter than average conditions. Noteworthy was the presence of five Nelson's sharp-tailed sparrows. These birds are typically found in the Polk-Marshall-Kittson area of northwestern Minn. 3/5/99

Great Lakes Basin Ecosystem Team Hosts Display at Outdoorama

Shiawassee National Wildlife Refuge

A total of 23 representatives from nine Great Lakes field offices plus three Region 3 staff and 12 members of the Friends of the Shiawassee NWR hosted the Great Lakes Basin Ecosystem Team exhibit at Outdoorama in Novi, Mich. Outdoorama is sponsored by the Michigan United Conservation Clubs, and is the largest outdoor show in the state. Approximately 100,000 people attend the show each year. Exhibitors have the opportunity to reach many people over the course of the 10-day event. The Ecosystem Team display focused on the work of the Service in the Great Lakes area. The display features beautiful photos, 3-dimensional objects, and an interactive Ecosystem puzzle for children. Many brochures, posters, and booklets were distributed. Through these types of events the Team hopes to familiarize the public with the missions, goals, and objectives of the Service and to ultimately reap increased public support for the Service. 3/5/99

Steamboat Bertrand Curator Assists in NPS Training

DeSoto National Wildlife Refuge

Bertrand Museum Curator, Sarah Tuttle, was asked to give an in-depth tour of the museum to participants in the National Park Service's "Basics of Archeological Collections Management" workshop. Twenty-four students and instructors spent several hours touring the exhibits, conservation laboratory and museum offices. Many of the management theories and methods covered in earlier course sessions were seen, in practice, at the Bertrand. Issues relating to archeological collections and their impact on collection managers and museum curators were highlighted. Later, the curator participated in a panel discussion intended to summarize the workshop's goals. Partners: Midwest Archeological Center, National Park Service, Lincoln, Neb. 3/5/99

Refuge Receives Award from Illinois DNR Eco Watch Program

Cypress Creek National Wildlife Refuge

Cypress Creek Refuge staff and volunteers have participated in the Illinois EcoWatch Network since 1995. The network is made up of individuals and organizations trained to conduct scientific monitoring of rivers, forests, prairies and wetlands. The Refuge works specifically with RiverWatch and ForestWatch in the Cache River Watershed. Long-term monitoring data achieved by this program will be applied to reforestation and wetland restoration efforts

implemented by the refuge and other Joint Venture Partners. Wetland Watch will be implemented next year in the Cache River watershed. 3/6/99

International Migratory Bird Day Event Planned for the Como Zoo

Minnesota Valley National Wildlife Refuge

Service staff met with Cindy Fowler of the Como Zoo to set the agenda for this year's International Migratory Bird Day (IMBD) festivities to be held for the fourth year at Como on Saturday, May 8th. This year's observance will be bigger and better than ever. Charlie Maguire, "The Singing Ranger" from the National Park Service has committed to two appearances for the day. There will be exhibitors for the first time ever in addition to "Certificates of Survival," poster awards to "winning warblers," and migration games. 3/7/99

Another Successful Service Display at Outdoorama

The Michigan Private Lands Office (PLO) participated for the third consecutive year in Outdoorama held in Novi, Mich., Feb. 26 - Mar. 7, 1999.. The PLO remained active in revising/modifying display elements, obtaining components for the display, and in details of set up, staffing and take down. Outdoorama is an outdoor equipment and recreation show sponsored by the Michigan United Conservation Club and draws more than 100,000 visitors. 3/7/99

Drieslein Receives U.S. Army Commander's Award

Upper Mississippi River National Wildlife & Fish Refuge

At the recent annual meeting of the Upper Mississippi River Coordinating Committee (UMRCC) Winona District Manager Bob Drieslein was presented the U.S. Army Commander's Award for his work on the Wabasha Prairie dredge disposal project. This award ranks directly below the Outstanding Civilian Service Award, and is something that we can take a good deal of pride in. Bob devised a very innovative way to handle a politically and environmentally sensitive problem at that site. The degree of interaction with U.S. Senators and Representatives's offices, State and Federal agencies, the local County Board, and local citizens was intense. In the end, even the most skeptical neighbors seemed satisfied with the product that Bob devised. Bob not only squirreled away 500,000 cubic yards of fill in an environmentally sound and aesthetically pleasing way, but in the process he had the contractor create some shallow wetlands on Service and state properties, and donate approximately 120 acres to the refuge. Given the local attitudes towards dredged material placement, this was a remarkable piece of work which has implications for how we deal with these situations in the future. 3/10/99

Active Eagles Nest on Chautauqua NWR

Chautauqua National Wildlife Refuge

On Lake Chautauqua's north Pool, a dead tree which supported a bald eagle's nest was blown down in early winter. The eagles quickly rebuilt the nest and it appears to be active. 3/10/99

Nesting Use Up in District's Hen House Program

Litchfield Wetland Management District

Litchfield Wetland Management District's predator management program annually maintains 160 dual cylinder hen house structures pole mounted in district Waterfowl Production Area wetlands for nesting waterfowl. Nesting use jumped from 33-49 percent and hatching success climbed 20-25 percent between 1997 and 1998. Abandonment was very high representing most nest failures. Placement strategy has entailed moving, adding to, and clumping structures in traditionally successful portions of wetlands to capture natal female returns. All nests surveyed were mallards except one blue-winged teal. 3/10/99

Minnesota Wetland Management Districts Implement GIS

Windom Wetland Management District

The first phase of implementing a Geographic Information System (GIS) for Minnesota Wetland Management Districts (WMD) is nearly completed. All WMDs have received the sys-

tem, training and Digital Orthoquads (DOQs) covering all lands within their District. Four of the five WMDs have entered approximately 90 percent of their Waterfowl Production Area ownership boundaries. Easement boundary and habitat layers will be entered next along with field accomplishments for 1999. System enhancement, training and support will continue to be provided by the Windom WMD. 3/11/99

New Waterfowl Production Area Purchased

Windom Wetland Management District

The Windom Wetland Management District recently purchased the 240 acre Stallkamp tract located in the upper portion of the Blue Earth River Watershed in western Freeborn County, Minn. Approximately 60 acres of wetlands will be restored for the benefit of waterfowl and other migratory birds, as well as provide water quality and flood water retention benefits. 3/11/99

Crane Meadows NWR Honors 17 Volunteers

Crane Meadows National Wildlife Refuge

Crane Meadows NWR honored 17 volunteers for 61 hours of service to the Refuge during 1998 at a recognition dinner on March 11 held jointly with Sherburne NWR and prepared by Refuge staff. Within this group, 15 regular volunteers were involved in activities that included grooming the cross-country ski trail, plowing snow, planting wildlife food plots, mowing and office clean-

ing. The three volunteer groups, Little Fall High School Natural Resource Class, St. Cloud State University Biology Department, and St. Cloud Area Learning Center, were involved in projects that included monitoring kestrel, bluebird, and wood duck boxes, waterfowl surveys, sandhill crane nest surveys and fence removal. The 61 hours of service contributed by Crane Meadows NWR volunteers during 1998 is a 21 percent increase from the 472 hours donated in 1997. 3/11/99

Youth Trapping on Ottawa NWR *Ottawa National Wildlife Refuge*

Youth participation for the Ottawa NWR youth trapping Program was limited to one person this year. The youth trapped two units on the refuge and harvested 25 muskrats. 3/15/99

Sherburne NWR Honors 503 Volunteers at Dinner

Sherburne National Wildlife Refuge

Sherburne NWR recognized 503 volunteers on March 11, for their contribution of over 8,800 hours of service to the Refuge during 1998 at an awards dinner prepared by Refuge staff. Within this group were 133 regular volunteers who participated in activities that included prairie seed collecting, wildlife interpretation, adopt-a-trail, adopt-a-fishing area, assistance with special events and many other public use, resource, and clerical projects. The five volunteer groups, Elk River ALC, St. Cloud State University Biology Department, Sentencing To Service, Telephone Pioneers of America and Silver Lakers

4-H, accomplished resource surveys, kiosk maintenance, bridge building and a variety of other special projects. Thirteen groups and families participated in the Adopt-a-Road Program. Robin DeLong of Princeton, Minn., received the 1998 Volunteer of the Year award for her contribution of over 300 hours of service during the past year through activities that included coordination of the wildlife film festival, team leader for a prairie seed collecting group, monitor for the oak savanna study, wildlife interpretation and much more. The dinner, held jointly with Crane Meadows NWR, was attended by 115 individuals. The 8,866 hours of service donated by Sherburne NWR volunteers during 1998 is a 25 percent increase from that of 1997. Partners: Friends of Sherburne NWR, Boy Scouts of America, University of Minnesota Sherburne County Extension 4-H, St. Cloud State University Biology Department, Sherburne County Highway Department, Erickson Asphalt, Sherburne County Sheriff's Department (Sentencing To Service), Elk River School District, Lakeview Care Center, Pheasants Forever, U.S. West Telephone Pioneers of America. 3/11/99

Duck Habitat Days a Success

Windom Wetland Management District

An estimated 250 people attended Duck Habitat Days, which was sponsored by the Farimont Chapter of the Minnesota Waterfowl Association and

held on February 20 with assistance from the Windom Wetland Management District. Information about Service Habitat Conservation Programs was provided by staff who were present to answer questions. Approximately 150 wood duck nest boxes were constructed and distributed to area youth.

3/11/99

Habitat Restored in the Heron Lake Watershed

Windom Wetland Management District

In recent years, 90 acres of wetlands, 188 acres of uplands and 10 miles of stream bank were restored within the Heron Lake Watershed Restoration Project using \$24,000 of Flood Funds provided through Cooperative Agreements with the Windom Wetland Management District. The Heron Lake Watershed District, Minnesota Department of Natural Resources and 26 landowners cooperated in this effort by contributing an additional \$43,000. Projects were designed to provide waterfowl, water quality and flood retention benefits. 3/11/99

Project WET Workshop Makes a Splash

Seney National Wildlife Refuge
Twenty-three K-8 classroom teachers attended the Project WET "Wetlands Education Trunk" workshop held in Marquette, Mich., on the Northern Michigan University campus. A variety of hands-on water and wetland education methods and resources were presented, and participants received the curriculum and activity guide, as

well as posters, pamphlets and newsletters to inform them of resources available from the Service and Seney NWR. Our Wetlands Education Trunk was on display with check-out information displayed. The goal of Project WET is to facilitate and promote awareness, appreciation, knowledge, and stewardship of water resources through the dissemination of classroom-ready teaching aids. 3/12/99

Service Staff Teach Fire Training at U of M - Crookston

Agassiz National Wildlife Refuge

Tom Zellmer, Fire Management Officer and Larry Anderson, Forestry Technician, Agassiz NWR, Biological Technician Larry Hanson, Detroit Lakes Wetland Management District; and Ross Heir, Minnesota Department of Natural Resources, put on a 2.5 day course of Fire Training (S-130 and S-190) on the University of Minnesota - Crookston Campus. The course ran from March 12-14, 1999.

About 40 college students and four Refuge Volunteers took the Course. Refuge volunteers were Marci Clark, Terry Barnett, Scott Graham, and Dave Grandmaison. This was an educational outreach effort with a local college, as well as an effort to provide a potential pool of trained summer hires. A fire truck with a slip on pumper, a variety of hand tools and water pumping units were on hand for demonstrations and hands-on training. Hose lays and water application were also demonstrated and tested. 3/14/99

Adult Trapping Program on Ottawa NWR

Ottawa National Wildlife Refuge
A single unit, the Darby Unit, on Ottawa NWR was opened to trapping in 1999. The top bid was for \$527.87 and 417 muskrat were removed from the unit. 3/15/99

Necedah NWR Hosts Fire Pack Test Site

Necedah National Wildlife Refuge

Necedah NWR staff arranged for pack test coverage by volunteer Necedah Fire Department's Emergency Medical Technician (EMT) personnel. The no-fee coverage resulted in nine Necedah, one Winona District, one Trempealeau, three Wisconsin Conservation Corp, and two U.S. Army Corps of Engineer personnel being able to take and pass this fire qualifying test, allowing these personnel to participate in burning. Two levels were given, and all personnel passed their particular level. 3/18/99

Artist Jim Hautman Partners to Restore Wetlands at Detroit Lakes WMD

Detroit Lakes Wetland Management District

Jim Hautman, wildlife artist and three-time winner of the national Duck Stamp Contest, is helping fund a planned wetland restoration at the Matter Waterfowl Production Area (WPA) of the Detroit Lakes Wetland Management District in Becker County, Minn. Mr. Hautman will partner with the North American Waterfowl Management Plan, Minnesota Waterfowl Associa-

tion and the Minnesota Department of Natural Resources to help fund the restorations, scheduled for next spring. Hautman will direct funds raised during the 1999 Federal Duck Stamp Classic held on July 9, 1999, at the Minnesota Hunt Club in Prior Lake, Minn. Other funding partners include the Minnesota Waterfowl Association, North American Waterfowl Management Plan, and the Minnesota DNR. Approximately 80 wetlands amounting to 120 acres and 280 acres of associated prairie grasslands will be restored on the WPA. The uplands will be seeded during the spring of 2000 and the wetlands are expected to be restored over a three to five year period.
3/19/99

Workshop at Necedah NWR is for the Birds

Necedah National Wildlife Refuge

On Saturday, March 20, 35 people attended a nest box building workshop at the Necedah NWR. Individuals chose bluebird, bat, or wood duck house kits to assemble. The Friends group obtained mostly donated lumber with the boards pre-cut by the Wisconsin Conservation Corps crew. Refreshments were provided by the Friends of Necedah. Instruction was led by OA Clerk Rabuck with assistance from a volunteer. The nest box kits included educational messages on each species and directions for box placement and maintenance. Attendees ranged in age from 3 to 73, with each attendee enthusiastically looking for-

ward to spring migration bringing back the animals that will use these new homes.

3/20/99

Girl Scouts Donate Nest Boxes to Necedah NWR

Necedah National Wildlife Refuge

On Saturday, March 20, Girl Scout Troop 140 from Necedah, Wis., attended a nest box building workshop at the Necedah NWR. The ten scouts assembled five bluebird houses and donated them to the refuge to help create usable areas for bluebirds. The girls earned wildlife badges with their efforts. The troop members also made a wood duck house and a bat box that they took with them to set near their meeting facility.
3/20/99

Hunter Education Students Certified with Safety

Upper Miss. River - LaCrosse
The Visitor Center of the Upper Mississippi River National Wildlife and Fish Refuge - La Crosse District was the site of a Wisconsin Hunter Education certification course. Thirty-three students were certified through the course and were given the opportunity to use the SAFETY (Simulated Action Firearm Education Training for Youth) system to provide a realistic exercise. Partners: Wisconsin Department of Natural Resources hunter education instructors.
3/20/99

Mingo NWR Hosts Hunter Education Class

Mingo National Wildlife Refuge
Mingo NWR hosted another hunter education certification course recently. Missouri re-

quires that each hunter must have complete a 10 hour course prior to hunting. Mingo generally hosts two such classes annually with one in early spring and the other held in the fall prior to the firearms deer season. Rod Hansen, ROS at Mingo and Mic Plunkett, Missouri Department of Conservation, Conservation Agent, along with some Mingo volunteers completed the teaching and certification this session. Partners: Missouri Department of Conservation
3/20/99

Junior Duck Stamp Contest at Muscatatuck NWR

Muscatatuck National Wildlife Refuge

Muscatatuck NWR volunteers ran the Indiana Junior Duck Stamp contest again this year. At the event, approximately 300 youngsters learned more about waterfowl and conservation through art. The Cinergy Corporation contributed funding for the program and the Muscatatuck Wildlife Society provided labor to handle the entries.
3/20/99

Japanese Students Visit Trempealeau NWR

Trempealeau National Wildlife Refuge

Trempealeau NWR hosted a visit by 16 students and adults from Kogota, Japan, on Mar. 23, 1999. The students were winners of an English speaking contest sponsored by the Kogota International Friendship Club. Refuge Manager Frietsche talked to the group about the Migratory Bird Treaty Act and the National Wildlife Refuge System's role in the conservation of migratory birds, fish, other wildlife, and plants. The

visitors liked the wolf posters and Refuge Week posters which they took back with them to Japan.
3/23/99

Service's Teresa Jaskiewicz Promotes Marsh Madness on Television

Prairie Wetlands Learning Center

Teresa Jaskiewicz of the Prairie Wetlands Learning Center (PWLC) appeared on a local cable television program, "Community Corner" in March to promote the upcoming "Marsh Madness" event at the PWLC. Jaskiewicz also demonstrated the construction of Wood duck houses. The program aired three times, reaching approximately 4,700 people. 3/23/99

Record Entries for Wisconsin Federal Junior Duck Contest Necedah National Wildlife Refuge

On March 24, the sixth annual Wisconsin Federal Junior Duck Stamp art judging contest was held. Out of 1,173 entries, a canvasback drawing by a 16 year old was selected Best of Show to represent Wisconsin in the national competition in Washington D.C. Dan Koepsell's art was selected by a panel of five judges with a wide variety of backgrounds, all of them relating to the art world and/or biology. The Wisconsin Waterfowl Association (WWA) arranged for the judges to donate their time for this youth event. WWA also provides prizes for the 100 pieces of art selected for recognition. This year's entry number of 1,173 was the highest yet - compared to last year when 849 entries were received. Matt Nickolay, Aid to Senator Russell

Feingold was present for the judging. The event was covered by a reporter from the Juneau County Star Times. Nineteen visitors came to observe, including two students who had artwork entered. 3/24/99

DeSoto NWR Participates in Job Shadow

DeSoto National Wildlife Refuge
DeSoto NWR hosted a high school junior from Dodge, NE, for a day of on-the-job shadow experience. Bertrand Museum Curator, Sarah Tuttle, introduced the general goals of the Service and discussed overall refuge programs and operations with the student. Refuge Operations Specialist, Mindy Sheets, explained the biological program and other aspects of wildlife management. The student toured the visitor center, walked a nature trail and observed a prescribed burn underway. 3/24/99

U.S. Geological Survey Red River Wetland Study Started Hamden Slough National Wildlife Refuge

U.S. Geological Survey (USGS) personnel were on Hamden Slough NWR, March 24 and 25, to begin a \$130,000 study titled: "Relations of Water Balance Processes on Wetlands and Small Watersheds in the Red River of The North Basin." The USGS will monitor water levels and flows and determine the precipitation runoff effects of wetlands and uplands. North Dakota State University's ground water study of Bisson Lake is also near completion and that data will be used in USGS's water balance equations. As the USGS's data

and results become available, it will be made accessible to the new interagency workgroups, being set up in the nine Watershed Districts in Minnesota's Red River Basin.
3/25/99

Donation of 25 Bluebird Boxes for Prairie Park Litchfield Wetland Management District

Volunteer Chuck Lee, a welder from St. Cloud, Minn., makes bluebird nest boxes from discarded wooden pallets as a hobby. He has donated boxes for Litchfield Wetland Management District (WMD) Waterfowl Production Areas in the past and has now donated 25 more for the City of Litchfield's Prairie Park. The boxes will be placed by local scout troops. The WMD is providing assistance in the management of the 26 acre park that has been seeded with native tallgrasses and flowers.
3/28/99

Seney Hosts Successful Filmfest Seney National Wildlife Refuge

Seney NWR Film Fest 1999 featured movies about the Service, National Wildlife Refuge System, and wildlife on the evenings of March 9, 16 & 23. A total of 113 (children, adults and seniors) attended, (37, 29, and 47 respectively) and for several it was their first visit to the refuge. The Seney Natural History Association provided coffee, hot cocoa and cookies. RSVP Volunteer Frank Hamilton played a major role in organizing and running the event. Four visitors signed up for volunteer information, and the leader of a differently-abled group of individuals requested informa-

tion on volunteer opportunities for them.
3/30/99

District Staff Place Hen Houses

Fergus Falls Wetland Management District

Troy Boschee and Brett Tully from the Fergus Falls Wetland Management District placed 222 nesting cylinders on waterfowl production areas throughout the district. 3/30/99

Minnesota Valley Reaches Public Through Education

Minnesota Valley National Wildlife Refuge

A total of 73 environmental education and interpretive programs reached 2,491 visitors at Minnesota Valley NWR during the second quarter of Fiscal Year 1999. Environmental education programming, including preschool and scout programs, reached 2,158 students. Three educator workshops were hosted reaching 125 teachers. Staff- and volunteer-led interpretive programs reached 377 visitors. Eight staff participated in the Government Expo at the Mall of America and reach 250,000 mall visitors.
3/30/99

Minnesota Valley Hosts Junior Duck Stamp Competition

Minnesota Valley National Wildlife Refuge

Approximately 800 entries from Minnesota Students in grades K-13 were received for this year's competition which was held on March 30. The judges for the competition were Robert Hautman, Federal Duck Stamp Artist, Rollie Brandt, Minnesota

artist, John Blankenship, Assistant Regional Director, Region 3, Jeff Hedtke, Board of Water and Soil Resources, and Chris Niskanen, Outdoors editor, St. Paul Pioneer Press. Barb Pardo, Joint Venture coordinator, served as Judge Advisor. Sara Stack from North High School in St. Paul, won "Best-of-Show" with a pair of lesser scaup done in acrylic. The competition was held at the National Guard Armory in Bloomington, Minn. Refuge staff and six volunteers worked at the competition. This year's judging event was open to the public for the first time. Several parents, students, and teachers were on hand to observe the contest. They commented favorably on how well the contest was run. KARE-11 television filmed the contest and aired a segment on the 6 p.m. news. The city of Bloomington Cable TV also videotaped the contest. 3/30/99

Service Acquires 120 Acres From USDA

Litchfield Wetland Management District

More than a decade after initial screening by Litchfield Wetland Management District (WMD) staff, two properties have been fee title transferred from the USDA Farm Service Agency to the Service. The two properties have been owned by the Department of Agriculture since 1983 and 1985, respectively. The properties were marginal from an agricultural production standpoint but will be valuable additions to the WPA system. The Winter property consists of 120 acres in Meeker county and

the Mellies property is 43 acres in Renville county. Persistence and flexibility were necessary attributes of the various Service personnel involved in shepherding these properties into the National Wildlife Refuge System. There have been three Farm Bills, numerous rule and policy changes, and a host of changes in the players involved. In addition to the Litchfield staff, two Service employees were key in making the transfer a reality. Lance Kuester of St. Cloud Private Lands and Greg Brown (ARW-Private Lands). Both expended considerable time and energy to ensure the transfers occurred. Both properties contain numerous wetlands and upland habitat. The uplands on the Mellies property were previously restored by Litchfield staff under a caretaker agreement. Much of the upland habitat and a few small wetlands on the Winter tract are still in need of restoration. 3/30/99

Minnesota Valley Hosts CCP Briefing

Minnesota Valley National Wildlife Refuge

As part of the Comprehensive Conservation Plan (CCP) process, Minnesota Valley NWR held an open house for non-profit and Natural Resource agencies on March 31, 1999.. Forty-eight representatives from various agencies toured the interactive displays, provided comments, and discussed their ideas for the Refuge's future with Refuge staff, and staff from the Department of Natural Resources.
3/30/99

EPA's Sixth Annual Watershed Partnership Seminar

Upper Mississippi River National Wildlife & Fish Refuge

Upper Mississippi River NWR Watershed Biologist Hawkins attended the U.S. Environmental Protection Agency's Sixth Annual Watershed Partnership Seminar, March 1-12 at the Office of Personnel Management's Western Management Development Center in Aurora, CO. Forty individuals representing state and federal agencies, as well as non-government organizations, attended the training session. Hawkins was the fourth Service employee to participate. The training program is designed to enhance leadership and team-building, as well as technical proficiency relative to watershed protection, as mandated under the federal Clean Water Action Program. 3/30/99

Recreational Fishing Project for the Disabled

Upper Miss. River National Wildlife & Fish Refuge-LaCrosse District
An area of approximately 60'x100' was dredged to provide a bank fishing location directly adjacent to a popular boat landing on Lake Onalaska (Upper Mississippi River Pool 7). The bank adjacent to the dredged area was rip-rapped to stabilize the bank. Phase II of the project will involve black-topping a wheelchair accessible pad with wheelchair bumpers, installing benches, providing handicapped parking areas and installing a disabled accessible fishing/boating dock. 3/29/99

Prescribed Burn at Muscatatuck NWR

Muscatatuck National Wildlife Refuge

Prescribed burns at Muscatatuck NWR, totaling 641 acres, were accomplished during March and April for purposes of shrub control and grassland habitat improvement. 3/99

Seney NWR Trunk Workshop for Scout Coordinators

Seney National Wildlife Refuge
Sixteen Regional Scout Coordinators from Michigan, Illinois, Indiana, Ohio and Wisconsin learned about the U.S Fish and Wildlife Service, Seney *National Wildlife Refuge*, and the education trunks offered at the refuge. Trunks focus on loons, wetlands, migratory birds, prairies and wolves 3/30/99.

Fourth Graders Learn at Multi-County Water Festival

Windom Wetland Management District

District staff and volunteers from the Windom Wetland Management District assisted with the Children's Water Festival, March 16. The event is sponsored by the Brown-Nicollet-Cottonwood Water Quality Board. The purpose of the Festival is to provide youth and classroom teachers with an innovative, quality, hands-on learning opportunity highlighting the relationship and interdependence of water to all living things. Over 1,200 4th grade students attended and 500 teachers attended presentations by Windom WMD which focused on wetland invertebrates and the food web. 3/30/99

Sportsmen's Club Recognized for Assistance

Windom Wetland Management District

Members of the Cottonwood County Game and Fish Protective League were recognized by the Windom WMD during a Spring Hunting Forum held on March 25, for assistance in acquiring the Blixeth WPA and restoring wetlands. The club contributed \$8,600 to restore wetlands and extend the Purchase Agreement with the previous landowner. This enabled the eventual fee purchase of this 160-acre unit. 3/30/99

Sportsmen's Clubs Help Increase Mallards Numbers

Windom Wetland Management District

Three local sportsmen's clubs recently donated a total of \$1,300 to help increase mallard production in the Windom WMD through the use of over-water nest baskets with tepee style cover-tops. The fiberglass, wicker-like tops are designed to be more attractive to nesting hens and protect them from avian predators. Use of this system in South Dakota has successfully shown that these baskets are as effective as the cylinder shaped hen house but may require less maintenance. The District will tryout a total of 20 structures on WPAs and private lands during the 1999 nesting season. Partners include: Cottonwood County Game and Fish League, Ducks Unlimited, North Heron Lake Game Producers. 3/30/99

Live Butterflies!*Shiawassee National Wildlife Refuge*

Eve Elliott, of Green Point Environmental Learning Center hosted its First Wednesday Discovery Series Program on April 7, 1999. Fifty-seven people attended the "Live Butterflies!" Program. Rick Mikula, author and founder of the Hole-In-Hand Butterfly Farm, presented a slide show and brought live butterflies. Participants learned about the amazing variety, abilities and importance of butterflies, tips for successful butterfly gardens, and how to raise them in their own home. 4/7/99

National Park Service Crew Assists with Refuge Burn*Driftless Area National Wildlife Refuge*

The Buffalo River Prescribed Fire Module from the National Park Service is assisting Effigy Mounds National Monument near the Driftless Area NWR at McGregor, Iowa. Thanks to the cooperation of monument personnel, the fire module was able to conduct a prescribed burn on the Driftless Area NWR just before rains came on April 8. The burn included remnant native prairie and was done to reduce woody vegetation encroachment. The fire required more people than the refuge has available and would not have been completed without the aid of the module and their equipment. 4/8/99

Insect Expo 1999 Attracts 3,000 Students*Cypress Creek National Wildlife Refuge*

Three thousand students, in grades K-8 participated in Insect Expo South sponsored by the Refuge and the Illinois Natural History Survey (INHS). Students learned about the value of insects and surrounding habitat. Insect Expo has been sponsored by the Illinois Natural History Survey for the past four years. Refuge staff partnered with INHS staff and brought the event to southern Illinois-Cache River Wetlands. The event was held in Shawnee College and included 25 interactive exhibits/activities. Partners include: Illinois Natural History Survey-Illinois Department of Natural Resources, Cache River State Natural Area, Natural Resource Conservation Service-SWCD, Anna-Jonesboro High School, Century School, Mingo Job Corps, and Shawnee Community College. 4/30/99

Renovation of Marquardt Pond*DeSoto National Wildlife Refuge*

A one-acre pond on DeSoto Refuge located in Harrison County, Iowa is under renovation. The renovation of Marquardt Pond will provide environmental education and related activities for church groups, inner city youth, 4-H clubs, Scouts and schools. Partners include: State Layman's Association of Omaha, Nebraska and American Family Insurance 4/30/99

Waterfowl Production Area Serves as Outdoor Classroom*Windom Wetland Management District*

Windom Wetland Management District trained instructors and assisted in teaching environmental education classes held on the Worthington Waterfowl Production Area, April 28, 1999. A total of 240 area fifth grade students participated in this outdoor education experience. 4/30/99

Muscatatuck NWR Celebrates Earth Day/Arbor Day*Muscatatuck National Wildlife Refuge*

Refuge staff at Muscatatuck NWR provided help with Earth Day/Arbor Day Programs at William H. English Middle School (250 sixth graders) and Vienna Finley Elementary School (300) students. Along with the program, each student received a tree seedling for planting at home. 4/30/99

District Participates in Otter Tail County Conservation Days*Fergus Falls Wetland Management District*

Chuck Vukonich from the Fergus Falls Wetland Management District was part of the 1999 Otter Tail County Conservation Day. Vukonich presented 12 talks about wetland ecosystems and the invertebrates associated with them to approximately 250 students and 15 parents. He also set up a fish aquarium with live samples of invertebrates, and microscopes for the students to use. 4/30/99

Four Pair of Sandhill Cranes Breeding On Refuge

Trempealeau National Wildlife Refuge

On April 24, 1999, seven volunteers coordinated by the International Crane Foundation counted sandhill cranes on Trempealeau National Wildlife Refuge from 5:30-7:30 a.m.. The volunteers were spread throughout the refuge in likely crane habitat and compared notes afterward to eliminate duplicate sightings. A total of thirteen sandhill cranes were observed or heard including four breeding pair. 4/30/99

Volunteer Orientation Held at Trempealeau NWR

Trempealeau National Wildlife Refuge

Twenty volunteers attended an orientation at Trempealeau NWR to increase their knowledge of volunteer requirements and Refuge operations. The volunteers watched the newly released video "America's National Wildlife Refuge System - Where Wildlife Comes First," listened to a slide show about the Refuge's wildlife, habitats, and public use opportunities, and discussed administrative aspects of the volunteer program. In addition, there was time to meet new volunteers and socialize. The workshop gave the volunteers a better understanding of the refuge that they can pass on to visitors. 4/30/99

Refuge Staff Reaches Students During National Wildlife Week Assemblies

Minnesota Valley National Wildlife Refuge

Minnesota Valley Refuge staff completed sixteen National Wildlife Week presentations at 10 schools reaching approximately 2,660 students and 130 teachers. "Nature's Web: Keep the Wild Alive" was the theme of this year's National Wildlife Week school assemblies. The focus was endangered species. Paul Burke and Nick Rowse of the Twin Cities Field Office (FO) each volunteered two half-days adding talent, expertise, and credibility to the Programs. MN Valley NWR staff Kathryn Cassem and Ed Moyer worked with K-2 students and grades 3-5. 4/30/99

Mingo Educators Reach 300 Eighth Graders at Earth Days

Mingo National Wildlife Refuge

Rod Hansen and Bridget Jackson taught a class on fabulous flora to approximately 300 eighth grade students from Butler County during the annual Earth Days events at Wapappello Lake. Students rotated through seven separate stations throughout the day to learn about fisheries, animal adaptations, and other natural resource related issues. 4/30/99

Minnesota Waterfowl Association Symposium

Fergus Falls Wetland Management District

Approximately 125 professionals and other individuals attended the waterfowl symposium held at the Best Western

in Fergus Falls. The symposium was sponsored by Minnesota Waterfowl Association. Jim Piehl from the Fergus Falls WMD also gave a presentation on the Stang Lake wetland restoration project and Kevin Brennan and Maynard Pick had lead discussions on the farm economy as well as a variety of natural resource issues. 4/30/99

Minnesota Junior Duck Stamp Ceremony Draws a Crowd

Minnesota Valley National Wildlife Refuge

Minnesota Valley NWR hosted the annual ceremony at the Minnesota School of Environmental Studies in Apple Valley, Minn., April 17, 1999. More than 450 guests were on hand to celebrate the successes of Minnesota youngsters who placed in this year's competition. Motivational speakers and a "song strumming" story teller saluted the talents of these children. A U.S. Postal Service Station was set up to commemorate the day. Stamps were marked with a cancel designed by Joseph Hautman, Federal Duck Stamp Artist. Philatelic products such as special cachets designed by student artists and Junior Duck Stamps were available. Each student received his or her ribbon and award while proud teachers, parents, and other family members viewed the individual's art on a large screen. Special honors went to Rebecca Latham, the first Minnesota student to place in the national competition and to this year's current Best-of-Show winner, Sara

Stack. Sara's painting titled, "Lesser Scaup at Rest," will be forwarded to Washington, D.C. for this year's National Competition. 4/30/99

Minnesota Junior Duck Program Gains Exposure

Minnesota Valley National Wildlife Refuge

Refuge staffer Judie Miller, participated in the Minnesota Academic Excellence Foundation (MAEF) ceremonies at the state capitol. MAEF encouraged the state legislature to promote academic excellence in the schools. Last year the Minnesota Junior Duck Stamp Program was nominated by MAEF to the "Reach for the Stars" Program due to its academic excellence. The Minnesota Junior Duck Stamp Program was invited to showcase its excellence by hanging this year's award winning art just outside the governor's office. 4/30/99

Minnesota Student Captures Second Place in National Contest

Minnesota Valley National Wildlife Refuge

Sara Stack, Maplewood, Minnesota took second place in the national competition for the Junior Duck Stamp Program, in Washington D.C. April 30. Sara is a 18-year old student at North Highschool in North St. Paul. Sara won second place with her acrylic rendition of a pair of lesser scaup. This was the first time that Sara had entered the contest. Sara, her art teacher, and one of her parents will be invited to Washington D.C. in November for an award ceremony. They will tour Wash-

ington and also attend the adult Federal Duck Stamp Competition. 4/30/99

Eagles Hatch at Necedah NWR

Necedah National Wildlife Refuge

The bald eagle pair nesting on the Refuge since 1995 again incubated and hatched this spring. At least one healthy eaglet was spotted by scope. Eagles were observed incubating from March 1 through April 14, 1999. Bald eagles have used this nest since 1995, hatching eaglets the past four years. On April 15, staff observed that hatching appeared to have occurred as the adult eagle discontinued incubation and was feeding young. One eaglet was observed by scope on May 4. 4/30/99

400 White Bass Stocked at DeSoto NWR

DeSoto National Wildlife Refuge

On April 19th, 1999, 400 white bass were stocked in DeSoto Lake, to assist with controlling the increasing gizzard shad population. Genoa NFH relocated these 8-15 midwater predator fish for the fourth consecutive year from the Mississippi River to DeSoto's 788-acre former oxbow of the Missouri River. 4/30/99

Necedah Hosts First Annual Earth Day Cleanup

Necedah National Wildlife Refuge

Earth Day activities were held on the Necedah National Wildlife Refuge April 28, 1999. Postponed from the previous week due to weather, the event hosted 230 area elementary students.

The K-5 graders cleaned up over 30 miles of refuge public roadsides, including parking areas and kiosk sites. At the end of the day, over 330 pounds of trash and recyclables were gathered by the students. Prizes were awarded from groups gathering the most trash, most recyclables, and for additional categories such as, the oldest item recovered, and the item requiring the longest time to decompose. Each student was given a tree seedling and plant seeds to take home in honor of Earth Day. Prizes and refreshments were provided by the Friends of Necedah NWR. 4/30/99

Conservation Class Makes Thirteenth Annual Class Trip to Necedah NWR

Necedah National Wildlife Refuge

A high school conservation class from River Valley High School in Spring Green, Wis., made its annual field trip to the Necedah NWR April 20, 1999. The class of 40 junior and senior students has come to the Refuge—once each spring and fall—for the past 13 years. Bio Tech Olson was on hand providing information and orientation to the students, and later took them on tour through the Ducks Unlimited Cooperative Project and up through the heart of the refuge for first hand looks at Service habitat management techniques and results. 4/30/99

Leopold WMD Hosts Private Lands Meeting

Leopold Wetland Management District

The Partners for Fish and Wildlife Program administered

by Leopold Wetland Management District held its annual private lands coordination meeting. The meeting was attended by over 30 staff members from Farm Service agency, NRCS, ACOE, Wisconsin DNR and various private conservation organizations. Topics of discussion included: various conservation programs available, resources available from agencies and conservation groups, and wetland and upland restoration procedures. The Leopold staff conducts partners projects in 10 counties within the District. Partners include: Wisconsin DNR, Natural Resources Conservation Service, U.S. Army Corps of Engineers, various county land and water conservation districts, Wisconsin Waterfowl Association. 4/30/99

Open House at DeSoto Visitor Center

DeSoto National Wildlife Refuge
DeSoto NWR held an open house for Chambers of Commerce at the visitor center. 40 business leaders attended and were shown the results of our remodeling, which includes a new info desk, an enlarged sales area and life-size wildlife dioramas that show the refuge's grasslands, wetlands and woodlands as they would have appeared in 1804 to Lewis and Clark. The open house was held to commemorate the 134th anniversary of the day the steamboat Bertrand sank. 4/30/99

Refuge Manager Phillips Appeared On Radio Show

Mark Twain National Wildlife Refuge - Brussels District

Refuge Manager Phillips appeared on "Outdoors with Larry Reid," April 18, 1999. The hour long show is broadcast on WBGZ-AM 1570 from Alton, Ill., just across the river from the greater St. Louis metropolitan area. John Gillespie, President of the Migratory Waterfowl Hunters, Inc. was also a guest on the show. Phillips and Gillespie discussed the two Corps of Engineers sponsored, multimillion dollar Habitat Rehabilitation and Enhancement Projects currently underway on the refuge's Calhoun and Batchtown Divisions, a willow removal project Gillespie's group recently completed on the Gilbert Lake Division, and several other refuge management issues of interest to area sportsmen. 4/30/99

Refuge Hosts Volunteer Appreciation Dinner

Shiawassee National Wildlife Refuge
Shiawassee National Wildlife Refuge hosted a Refuge Volunteer Appreciation/Recognition Dinner, April 15, 1999, at the Green Point Environmental Learning Center. Following the catered dinner, Refuge volunteers received Certificates of Appreciation and their choice from a number of free gifts. The Shiawassee Flats Advisory Council received an engraved plaque for their support, and the Volunteer of the Year, Gary Van Kirk, received a plaque and gift certificate. His name is also engraved on a Volunteer of the Year plaque which hangs on the wall at Green Point ELC. A guest speaker presented a program

on the backwater areas of the Shiawassee Flats. A total of 76 volunteers donated nearly 3,000 hours of time to Shiawassee NWR during Fiscal Year 1998. 4/30/99

Service Represented at Downriver 2000 Summit

Shiawassee National Wildlife Refuge

The Great Lakes Basin Ecosystem Team was represented at the economic/environmental summit by Team Leader Doug Spencer. A Service display was presented to the 400 participants with information of what Service employees can provide to the Downriver communities to assist in sustainability. Workshops were provided to the participants that explained how infrastructure/development/economics can be accomplished by providing a healthy watershed to the communities. The Summit highlighted the goals of the American Heritage designation of the Detroit River. This summit is expected to be the first of an annual event, with future summits looking not only to the future, but also to the accomplishments made since the last year. 4/30/99

225 Trees Planted at DeSoto National Wildlife Refuge

DeSoto National Wildlife Refuge
From April 15-17th, a volunteer and Refuge Operations Specialist Steve Van Riper planted 225 Scotch and White pine tree seedlings on DeSoto NWR. These trees were donated by the Loess Hills State Forest and were hand planted among the 700 seedling trees and

shrubs that were planted in 1998. This is part of an old wind break/shelter belt, near the Headquarters and residence, that was planted when DeSoto Refuge was first established. 4/30/99

Necedah National Wildlife Refuge Celebrates Wildlife Week

Necedah National Wildlife Refuge

On April 17, community members attended a National Wildlife Week open house at Necedah National Wildlife Refuge. Activities included a massasauga rattlesnake slide show, a prescribed burning presentation, the unveiling of the new Truax drill, a guided refuge tour, and a slideshow on the Yellow River Area. Attendees also had the opportunity to attend a Friends of Necedah meeting and test their wildlife knowledge with a quiz on a variety of wildlife related items. Refreshments and prizes were provided by the Friends of Necedah. An additional 38 area schools were provided with information packets obtained from the American Wildlife Federation - reaching 4,750 students in 3-6 grades. 4/30/99

Necedah NWR Attends Volunteer Fair

Necedah National Wildlife Refuge

Refuge staff attended a volunteer fair held at University of Wisconsin-Eau Claire, April 20, 1999, setting up a display on volunteer opportunities at Necedah NWR.. Held in the school courtyard, exhibitors contacted students with a variety of majors and back-

grounds recruiting for volunteers. Over 100 students picked up information on volunteer opportunities at the Refuge, of which 25 expressed interest in becoming volunteers. 4/30/99

13th Annual Class Trip to Necedah NWR

Necedah National Wildlife Refuge

On April 20, the River Valley High School Conservation class from Spring Green, Wisconsin, arrived at Necedah NWR at dawn with their teacher and bus driver. This school's classes of 40 students (juniors and seniors) have visited the refuge for field trips for 13 years, each spring and fall. Bio Tech Olson was on hand providing information and an orientation to the students, and later took them on a tour through the Ducks Unlimited cooperative project and up through the heart of the refuge for first hand looks at Service habitat management techniques and results. 4/30/99

Illinois River CCP Public Meetings

Illinois River National Wildlife & Fish Refuge

Public involvement and scoping meetings were held the week of April 19, 1999, as part of the Comprehensive Conservation Plan for the Illinois River Refuge's. Meetings were held at Meredosia,, Henry, and Havana, Illinois. 4/30/99

300 Assist In Spring Clean-up At Sherburne NWR

Sherburne National Wildlife Refuge

More than 300 people took part in the annual spring clean-up at

Sherburne NWR, April 17 and throughout the following week, providing valuable help in sprucing up Refuge public use areas. The event was co-sponsored by the Refuge and the Friends of Sherburne. Projects included litter pick up from over 50 miles of county roads that border and dissect the Refuge, trail maintenance and sign posting on two hiking trails, brush clean-up at a timber sale site, post straightening in four parking areas, gate repair, leaf raking and window washing. The big project of the day was the construction of a new observation deck on the Wildlife Drive by 28 members of the Telephone Pioneers. The event was supported by 7 local non-profit agencies which included the Friends of Sherburne, Pheasants Forever, University of Minnesota Extension for Sherburne County (4-H), Boy Scouts of America, Elk River School District, Lakeview Care Center and the Telephone Pioneers. Following the completion of the projects, a free hot dog lunch and optional birding tour on the Wildlife Drive was offered to all volunteers. 4/30/99

National Wildlife Week School Assemblies Focus on Endangered Species

Minnesota Valley National Wildlife Refuge

Nature's Web: Keep the Wild Alive was the theme of this year's National Wildlife Week school assemblies. The focus was endangered species. Paul Burke and Nick Rowse of the Twin Cities Field Office (TCFO) each volunteered two half-days adding talent, expertise, and credibility to the

programs. Kathryn Cassem worked with K-2 students while Ed Moyer and one of the TCFO biologists generally concentrated on grades 3-5. Sixteen separate presentations in ten schools reached approximately 2,660 students and 130 teachers. 4/30/99

Necedah NWR Celebrates Wildlife Week

Necedah National Wildlife Refuge

Forty-six people attended an open house at the Refuge in celebration of National Wildlife Week. Additionally, 4,750 students were reached through the Refuge's distribution of National Wildlife Federation packets to 38 area schools. On April 17, 1999, community members attended a National Wildlife Week open house at the Necedah NWR. Activities included a massasauga rattlesnake slide show, a prescribed burning presentation, the unveiling the new Truax native grass seeding drill, a guided refuge tour, and a Yellow River Area slide show. Attendees also had the opportunity to attend a Friends of Necedah meeting and to test their wildlife knowledge with a quiz on a variety of wildlife related items. Refreshments and prizes were provided by the Friends of Necedah. 4/30/99

Outstanding Turnout for Crane Count 1999

Horicon National Wildlife Refuge

Horicon NWR hosted the annual Dodge county crane count. This year we had the best turnout ever of new volunteers for the crane count.

Over 50 new people participated in the orientation meeting and crane count. Most years more than 25 sites go uncounted. This year we only had 12 sites that went uncounted. The great turnout can be attributed to better press and media attention. We had the best volunteer recruitment ever for the annual crane count. This year 121 people participated in counting 59 of the available sites in Dodge county. Partners include: International Crane Foundation and UW-Madison Wildlife Ecology class. 4/30/99

300 Assist in Spring Clean-up At Sherburne NWR

Sherburne National Wildlife Refuge

More than 300 individuals, families, and groups took part in the annual Spring Clean-up at Sherburne NWR, April 17, 1999, and throughout the following week, providing valuable help in sprucing up Refuge public use areas. The event was co-sponsored by the Refuge and the Friends of Sherburne NWR. Projects included litter pick up from over 50 miles of County roads that border or pass through the Refuge, trail maintenance and sign posting on two hiking trails, brush clean-up at a timber sale site, 8x8 post straightening in 4 parking areas, gate repair, leaf raking, and window washing. The big project of the day was the construction of a new observation deck on the Wildlife Drive by 28 members of the Telephone Pioneers. The event was supported by 7 local non-profit agencies which included the Friends of Sherburne, Pheasants Forever, University

of Minnesota Extension for Sherburne County (4-H), Boy Scouts of America, Elk River School District, Lakeview Care Center and the Telephone Pioneers. Following the completion of the projects, a free hot dog lunch and optional birding tour on the Wildlife Drive was offered to all volunteers. 4/30/99

Prescribed Burn Results For Mark Twain NWR-Annada District

Mark Twain National Wildlife Refuge- Annada District

The Mark Twain NWR, Annada District completed the 1999 prescribed burning season by conducting six burns which totaled 772 acres. Three of the burns, totaling 127 acres, were conducted on the Delair Division. Three burns were also conducted on the Clarence Cannon NWR totaling 645 acres. This includes a 430 acre wet prairie unit which was burned to reduce undesirable vegetation and help maintain grassland. 4/30/99

Earth Day Celebrated at Meredosia NWR

Illinois River National Wildlife & Fish Refuge

On April 22, Earth Day was celebrated April 22, 1999 at Meredosia NWR with approximately 280 teachers and students participating from Meredosia elementary, junior and senior high schools. Students and teachers assisted the refuge by planting over 1,000 live prairie forbs, seeded prairie grasses and forbs, helped maintain the hiking trail, cleaned up trash, and built bluebird and

screech owl nest boxes. Students also roasted hotdogs and saw a slide presentation on bluebirds. 4/30/99

Earth Day Celebrated at Chautauqua NWR

Illinois River National Wildlife & Fish Refuge

On April 24, Earth Day was celebrated on Chautauqua NWR with 20 volunteers from the Havana High School Ecology Club, Americorps, and members of the Friends of the Illinois River group. Volunteers participated in a morning clean-up of the Lake Chautauqua Road. After lunch, binoculars were handed out and a spotting scope was set up to allow volunteers to observe bald eagle nesting behavior in an active refuge eagle nest. 4/30/99

Meeting on Weis Lake Habitat Restoration

Illinois River National Wildlife & Fish Refuge

Refuge staff met with private landowners, Ducks Unlimited, and ARCS staff to discuss issues and possible action needed to resolve the drainage and habitat degradation problems on Weis Lake of the Cameron-Billsbach Division of the refuge and in the Crow Creek watershed. These issues were also discussed with members of the Illinois River Coordinating Council. Ducks Unlimited is interested in providing engineering and contracting services as well as money for restoration of the Weis Lake habitat. 4/30/99

LTRM Assists Refuge with North Pool Monitoring

Illinois River National Wildlife and Fish Refuge

The Long Term Resources Monitoring Project staff at Havana, Illinois have agreed to monitor water quality, invertebrates, fish and plant communities in the north pool of Chautauqua NWR to assist with evaluation of management of a backwater lake without river connectivity. The Illinois Department of Natural Resources has stocked genetically correct bluegill and crappie. Largemouth bass and catfish will as well. 4/30/99

Seney Refuge's Seasonal Interpreter Wins Recognition

Seney National Wildlife Refuge

At a recent annual workshop of the Great Lakes Region of the National Association for Interpretation (NAI), Jennifer Wycoff-McDonough, Temporary Seasonal Park Ranger at Seney NWR, received the Outstanding Seasonal/Part Time Interpreter Award. The award is given annually to an NAI member who does not work full time in the profession but has made a significant contribution in their limited time frame, and has demonstrated outstanding creativity and effectiveness in interpretation. The Great Lakes Region of the NAI has more than 400 members in the states of Michigan, Ohio, Indiana, and the province of Ontario, Canada. 4/30/99

Volunteer Orientation held at Trempealeau NWR

Trempealeau National Wildlife Refuge

Twenty volunteers attended an orientation workshop at Trempealeau NWR. The volunteers watched the newly released video "America's National Wildlife Refuge System, Where Wildlife Comes First" viewed a multimedia slide show about Trempealeau NWR's wildlife, habitats and public use opportunities, and discussed administrative aspects of the volunteer program. In addition, there was time to meet new volunteers and socialize. 4/30/99

Operation Roadside Clean-up Litchfield Wetland Management District

Eight employees (and one child of an employee) of the Litchfield Wetland Acquisition and Management Office did roadside cleanup on two miles of U. S. Highway 12. 4/30/99

Service Instructs Litchfield Gun Safety Students

Litchfield Wetland Management District

District and acquisition staff members guest lectured 92 area kids and several adults enrolled in a Litchfield gun safety certification course. Students were instructed on Federal laws and regulations, the Waterfowl Production Area System, and the Duck Stamp Story. Instruction was also provided on black powder hunting, rifle use, care, and safety. 4/30/99

National Park Service Aids Litchfield WMD Prescribed Fire Program

Litchfield Wetland

Management District

In the spirit of interagency cooperation, National Park Service's Buffalo Module blackened 258 acres on 2 Waterfowl Production Areas in Kandiyohi and Wright counties. Predominately tall native grass stands were burned in an effort to increase their vigor, maintain plant diversity, reduce weed growth, and set back prairie encroaching woody vegetation. The module is a professional prescribed burning team who required a minimal amount of preparation and supervision and greatly enhanced the District's fire management goals. 4/30/99

Elimination of Harmful Public Utility Lines

Crab Orchard National Wildlife Refuge

Portions of 1942-era utility loop lines located on Crab Orchard NWR are no longer in use and need to be removed from the Refuge. In order to facilitate their removal and salvage, the utility lines were offered for sale to interested buyers. This process resulted in the sale of the utility lines in the amount of \$560. Removal is scheduled for within 100 calendar days of the date of sale. Removal of the obsolete utility lines will result in the enhancement/restoration of 4.36 acres of wildlife habitat on the Refuge. 4/30/99

Prescribed Fire Nourishes Litchfield Grasslands

Litchfield Wetland Management District

The District took advantage of a dry stretch of April weather and burned 2,352 acres on 13 Waterfowl Production Areas. National Park Service's Buffalo Module rendered burning assistance on 2 of the units. Predominately cool season native grass stands have been targeted so far, however, at least 1,000 acres of warm season grasses are scheduled the remainder of the season. Fire is extremely effective in discouraging competing exotic plant growth while favoring native grasses and forbs. The denser, more diverse native vegetation provides ideal cover for nesting wildlife. 4/30/99

Necedah Hosts First Annual Earth Day Cleanup

Necedah National Wildlife Refuge

On April 28, Earth Day activities were held on the Necedah National Wildlife refuge. The event was attended by 230 area elementary students. The students cleaned up over 30 miles of refuge roadsides, including parking areas and kiosk sites. At the end of the day, over 330 pounds of trash and recyclables were gathered by the students. Prizes were awarded from groups gathering the most trash, most recyclables, and for additional categories such as, the oldest item recovered, and the item requiring the longest time to decompose. Each student was given a tree seedling to take home in honor of Earth Day. Prizes and refreshments were provided by the Friends of Necedah NWR. 4/30/99

Refuge Staff Participate in Insect Expo South

Cypress Creek National Wildlife Refuge

Insect Expo has been sponsored by the Illinois Natural History Survey in Champaign Illinois for the last 5 years. Refuge staff partnered with INHS staff and brought the event to southern Illinois. The event was held in Shawnee College and included 25 interactive exhibits/activities. Throughout the day, 3,000 K-8th grade students participated in 25 interactive exhibits/activities. Seventy Refuge volunteers and staff assisted with hands-on activities and learning stations. Based on teacher and staff response, the event was an outstanding success and will be repeated every two years. Partners include: Illinois Natural History Survey-Illinois Department of Natural Resources, Cache River State Natural Area-IDNR, Natural Resource Conservation Service-SWCD, Anna-Jonesboro High School, Century High School, Mingo Job Corps, Shawnee Community College. 4/30/99

Cypress Creek Refuge Reforest 320 Acres

Cypress Creek National Wildlife Refuge

This spring included a record for the most seedlings planted on the Cypress Creek National Wildlife Refuge between February and April 1999. Refuge staff reforested 320 acres with 143,000 native hardwood seedlings. Seedlings were acquired from the IDNR-Division of Forestry and the Finkle Foundation. 4/30/99

Refuge Staff Assist with Stewardship Week

Cypress Creek National Wildlife Refuge

Refuge staff assisted with Stewardship Week, a school event sponsored by the Forest Resource Center. The event was held the week of April 28 for K-6th grade students within southern Illinois counties. Refuge staff ran 20-minute sessions on wetlands. Participants included 678 students. 4/30/99

Necedah NWR Spring Prescribe Burns 2,776 Acres

Necedah National Wildlife Refuge

Refuge staff and the Refuge-based Wisconsin Conservation Corps crew prescribe burned 12 units, totaling 2,776 acres. The average cost per acre treated was \$1.99. Included in costs are wages, equipment operation costs, fuel, and any operational expenses. Three wildfires were also part of this spring's activities totaling 25 acres costing \$6,614 or \$264.56 per acre. The Wisconsin Dept. of Natural Resources aided in putting out one wildfire on refuge property over 20 acres with two tractor plow units, two type 6 engines and 3,000 gallons of water/foam mixture were dropped from an air tanker in five loads. 4/30/99

Whooping Crane Sighted in NW Kandiyohi County

Litchfield Wetland Management District

At 10 a.m. April 28th, an immature Whooping Crane (*Grus americana*) was sighted during waterfowl counts on a 15-acre restored, private,

pastured wetland next to the Freese WPA. It was first thought to be a white pelican, but the fact that it leaped into the air from a mudflat, only its primary wing feathers were black and flew with its rusty head/neck and black legs extended, removed that possibility. The bird was not seen on subsequent visits. 4/30/99

Refuge Hosts 5K Run/Walk

Muscatatuck National Wildlife Refuge

Muscatatuck NWR was the site for a 5K run/walk sponsored by the local Seymour High School Marching Owls Band. Inclement weather reduced the expected number of participants to just over 50, including 1st term ninth district U.S. Congressman Baron Hill of Seymour. 4/30/99

Four Pair of Sandhill Cranes Breeding on Refuge

Trempealeau National Wildlife Refuge

On April 24, 1999, seven volunteers coordinated by the International Crane Foundation counted sandhill cranes on Trempealeau National Wildlife Refuge. The volunteers were spread throughout the refuge in likely crane habitat and compared notes afterwards to eliminate duplicate sightings. A total of thirteen sandhill cranes were observed or heard including four breeding pair. 4/30/99

Volunteers Participate in Necedah Crane Count

Necedah National Wildlife Refuge

On April 24, volunteers participated in the Juneau County Midwest Sandhill crane Count.

The annual event is sponsored by International Crane Foundation. Necedah NWR had 10 volunteers donating 115 hours training, scouting, and counting cranes. When the tallies came in after two hours in the marshes, 210 cranes were counted. Friends of Necedah provided refreshments after the count. Juneau county had additional volunteers counting cranes throughout the county. 4/30/99

Eagles Hatch at Necedah National Wildlife Refuge

Necedah National Wildlife Refuge

Bald eagles have been nesting on the Necedah NWR since 1995 and have hatched eaglets in the last four years. This year, eagles were observed incubating, March 1 through April 14. Hatching appears to have occurred on April 15 as the adult eagle discontinued incubation and was feeding young. One eaglet was observed by spotting scope on May 4. 5/30/99

First Osprey Nest on Necedah NWR

Necedah National Wildlife Refuge

An active osprey nest was discovered on the Sprague Mather Flowage at Necedah NWR on April 29. The nest is on an artificial platform that was put up by former Biologist Richard Nord about 10 years ago. Since April 9, the female has been observed incubating on several occasions with hatching in May. This is the first active osprey nest Bio Tech Olson had seen in 20 years on the refuge. 4/30/99

Seney Staff Provides Partnership Presentation at Northern Michigan University

Seney National Wildlife Refuge
Interpretive Specialist Marianne Kronk was invited to team teach a class session on Partnerships at Northern Michigan University for an Outdoor Recreation Management Course. The 19 students and their professor also learned about the USFWS mission, and opportunities for recreation, internships and careers in the system and at Seney NWR. A short presentation was made to an additional class of 11 students on internship opportunities. 4/30/99

Litchfield Assists with Management of Prairie Park

Litchfield Wetland Management District

The City of Litchfield received a gift of 26 acres to their park system. The area has been seeded to native tallgrass prairie grasses (18 species) and forbs (70 species). The Litchfield WMD has agreed to assist in the management of this city park and has donated bluebird boxes. Staff conducted a prescribed burn in the spring and plan got community involvement in harvesting forb seed during the summer/fall. The seed will be used to restore prairie on the nearby Stone Lake WPA.

4/30/99

Open House at DeSoto Visitor Center

DeSoto National Wildlife Refuge

DeSoto National Wildlife Refuge held an open house for Chambers of Commerce at the visitor center. 40 business leaders attended and were

shown the results of our remodeling. Remodeling included the addition of a new information desk, an enlarged sales area and life-size wildlife dioramas that show the refuge's grassland, wetland and woodland as they would have appeared in 1804 to Lewis and Clark. The open house was held April 1 to commemorate the 134th anniversary of the day the steamboat Bertrand sank. 4/30/99

Necedah National Wildlife Refuge Hosts Crane Counters

Necedah National Wildlife Refuge

On April 10, a group of citizens looking to help wildlife attended an educational meeting on the International Crane Foundation's 27th Annual Midwest Crane Count. The 28 attendees learned about basic crane biology, history, and identification. Counters travelled to the marshes on April 24 in an effort to get an accurate count of the number of individual and breeding pairs of sandhill cranes. A slide presentation was given by Jennifer Rabuck on the many aspects of cranes in Wisconsin. Arris Sullivan, the Juneau County Crane Count Coordinator, gave participants details on recording and tallying their sightings. 4/30/99

Audubon Society Meeting

Mark Twain National Wildlife Refuge-Brussels District

Refuge Manager Phillips and Biological Technician Heilhecker attended the Illinois Audubon Society - Great Rivers Chapter meeting April 6, in Alton, IL. Biological Technician Heilhecker spoke to 14 mem-

bers on vegetation problems in the refuge's moist soil units. Topics included which species are undesirable, why and management techniques for controlling problem plants. Manager Phillips described moist soil management and answered questions regarding the future management of the refuge. 4/30/99

Hunter/Trapper Clinic Successful

Upper Mississippi River National Wildlife & Fish Refuge - LaCrosse District

The Wisconsin Department of Natural Resources, Wisconsin Trappers Association, Refuge, and local trappers partnered to sponsor a Hunter/Trapper information clinic at the Refuge April 10. Approximately 30 La Crosse, Wis., area trappers and waterfowl hunters attended the clinic to learn about trapping sets, discuss ethics between the two user groups and to discuss changes in the state regulations which will affect the Wisconsin waterfowl hunters and trappers. This year will mark the first time in over 20 years that the two user groups will be sharing the resource at the same time. 4/30/99

Pool 8 Island Phase II Construction Restarts

Upper Mississippi River National Wildlife & Fish Refuge

The Phase II, Lower Pool 8 Island Project construction resumed including the construction of the Stoddard Bay Habitat Project for completion in the summer of 1999. The construc-

tion of the seven new islands restores a 500-acre backwater complex. The project improves this area for fish, migratory birds, and a variety of Partners include: U.S. Army Corps of Engineers, St. Paul District Minnesota Department of Natural Resources Wisconsin Department of Natural Resources. 4/30/99

Refuge Receives Support from Waterfowl Group

Upper Mississippi River National Wildlife & Fish Refuge - LaCrosse District
Wisconsin Waterfowl Association donated 1,000 Ducks at a Distance books for use with the Refuge's Ducks-on-a-Stick Program. This educational Program reached over 6,000 people last year and continues to grow in popularity. The donated books will be used with youth groups to help teach waterfowl identification through hands-on learning with Ducks-on-a-Stick. 4/30/99

Muscatatuck Hosts Indiana Junior Duck Stamp Awards

Muscatatuck National Wildlife Refuge
Muscatatuck NWR hosted an awards ceremony for winners of the Indiana Junior Duck Stamp contest on April 24, 1999. Approximately 55 people—teachers, parents, and students—learned more about national wildlife refuges and the Service during the awards ceremony. Partners include: Cinergy Corp., Muscatatuck Wildlife Society; Indiana Chapter of Ducks Unlimited and Indiana Department of Natural Resources. 4/30/99

Service Display Part of Sustainable America Event in Detroit, Mich.

Michigan Private Lands Office
The Michigan Private Lands Office, Shiawassee National Wildlife Refuge and East Lansing Field Office teamed up to prepare and staff an exhibit at the Sustainable America event May 2-5, 1999, in Detroit, Mich.. The display highlighted the Service's efforts to sustain trust resources such as migratory birds, fish, endangered species and refuge lands for the benefit of the American public. 5/5/99

International Migratory Bird Day Celebrated at Lansing's Potter Park Zoo

Michigan Private Lands Office
On May 8, 1999, several volunteers and organizations gathered with the Service to host an International Migratory Bird Day celebration at Potter Park Zoo in Lansing, Michigan. This was our third annual celebration. Despite the bad weather, the event was a success and attracted mostly families with young children that participated in a variety of hands-on activities relating to migratory birds. Partners include: Potter Park Zoological Society, Fenner Nature Center, Capitol Area Audubon Society, Ingham County Conservation District, Explorer Post 100, Woodcraft Kits, International Crane Foundation and Kellogg Biological Station. 5/8/99

Prairie Wetlands Learning Center Celebrates Diversity of Migratory Birds

Fergus Falls Wetland Management District/PWLC
Prairie Wetlands Learning Center (PWLC) in Fergus Falls, Minn., held a special event focusing on the diversity of migratory birds in celebration of International Migratory Bird Day May 8, 1999. The 30 adults and 25 students attending the event participated in various activities and gathered information at booths and displays. Featured works of local watercolor painter/naturalist, Marion Otnes, were on display in the Visitor Center. Lake Country Gardens donated plants for booths and displays. Wild Bird Unlimited had various items for sale in the Great Hall. Information was available on birdscape your yard and garden, setting up a bird feeding station, squirrel proofing your feeders, and making your water garden bird friendly. Ongoing activities included bird walks around the PWLC, bird behavior bingo, and preparing gourds for bird houses. The gourds were donated by Jim Palmer, a volunteer at the Learning Center. Families were encouraged to take their birdhouses home. Bird pinatas were broken by enthusiastic children at scheduled times throughout the day. Young and old said they enjoyed our Bird Day Celebration. The filming of our monthly Earth Stewards cable TV show captured the event to be broadcast to an average of 4,200 viewers this month. 5/8/99

Woodcock Singing Ground Surveys on Ottawa National Wildlife Refuge

Ottawa National Wildlife Refuge

A woodcock singing ground survey route was established through the main unit of the Ottawa National Wildlife Refuge Complex to help conduct woodcock surveys during 1999. The route consists of 13 stops at .4-mile intervals on a route that runs through the Ottawa Division of Ottawa National Wildlife Refuge. Surveys were conducted on three separate occasions by Chris Crofts, a refuge volunteer, between April 20 and May 4, 1999. The highest occurrence of calls of peenting woodcock was recorded during the second survey April 29 with 18 calls recorded. Other surveys recorded counts of 12 and 13. The survey will be repeated each year to monitor changes in relative numbers and spatial occurrence of woodcock throughout the refuge. The numbers recorded at each listening station is stored in a GIS database at the Refuge headquarters. 5/15/99

Prescribed Burn at Wapello District

Mark Twain National Wildlife Refuge, Wapello Dist.

On March 17, 18, and 19, the Wapello District of the Mark Twain National Wildlife Refuge completed three prescribed burns on the Horseshoe Bend Division, totaling 1,026 acres. The burns were done for the purpose of managing native prairies and enhancing stands of prairie cordgrass, setting back invading trees and brush, and

fuel reduction. If weather conditions remain favorable, the District has about 900 additional acres planned for prescribed fire. 3/19/99

Interagency Flood Reduction Task Force

Hamden Slough National Wildlife Refuge

The eight-interagency Red River Basin Flood Damage Reduction Workgroup completed phase I of the flood damage mediation process begun in 1997. The Crookston meeting is a review of that work, and the first step of a pioneering initiative to build consensus and aid in the decision making process for flood damage reduction and natural resource enhancement. The meeting represented a major step forward for old antagonists, with new cooperative attitudes demonstrated by many represented agency personnel. Multi-agency Watershed District Workgroups were formed and began the review of issues, alternatives and solutions. 3/19/99

Necedah NWR Visits Local Kindergarten

Necedah National Wildlife Refuge

Refuge staffer Jennifer Rabuck visited Necedah Area District School and gave a presentation in honor of International Migratory Bird Day. The 55 students and four teachers viewed a short video, then discussed bird adaptations and habitats. The students were able to interact with mounted specimens and practice their newly acquired knowledge by completing some worksheets developed by Rabuck. 5/30/99

All Aboard the Floating Classroom!

Minnesota Valley National Wildlife Refuge

More than ,700 students from 21 elementary schools studied the Mississippi River and its watershed while aboard a river paddle boat. Prior to the 16 paddle boat field trips, four teacher workshops were conducted in February to prepare teachers. Over 1,700 students connected with the Mississippi River from a floating classroom on the river. During the two-hour paddle boat trips, called the "Big River Journey", students learn about the Mississippi River and it's watershed through six learning stations. "Big River Journey" is coordinated by the Mississippi National River and Recreation Area (National Park Service) and the Minnesota Valley National Wildlife Refuge's environmental education staff and volunteers partner in this unique learning experience. Four other public and private organizations partner with the "Big River Journey", which includes 16 river field trips in May and 4 teacher workshops in February. Partners include: Mississippi National River and Recreation Area (National Park Service), Padelford Packet Boat Company, Science Museum of Minnesota, and Minnesota Department of Natural Resources. 5/30/99

Wintering Trumpeter Swan Returns to Refuge, Part of Re-Introduction Effort

Muscatatuck National Wildlife Refuge

One of the 4 trumpeter swans which wintered at the Refuge in a project designed to establish an Eastern migratory flock was confirmed to have returned to the Ontario training site. It is a good indication that the migration route can be taught. 5/30/99

Muscatatuck NWR Works With Local Industry

Muscatatuck National Wildlife Refuge

Refuge staffer Susan Knowles is a member of the ISO-14000 (Environmental Management Systems) stakeholder group formed by Kobelco Metal Powder of America, Inc. This group first met on May 10, 1999, for an overview of the pilot grant Kobelco received to implement ISO-14000 from IDEM (Indiana Department of Environmental Management). Areas key to the stakeholders group are environmental impacts and aspects which are significant and to develop objectives and targets to be implemented. Other members of the group include local industry, a local farmer, city fire chief, city wastewater treatment coordinator, and consulting environmental firms. 5/30/99

Students Plant Trees on Trempealeau NWR

Trempealeau National Wildlife Refuge

Trempealeau NWR partnered with University of Wisconsin-Eau Claire and the National Tree Trust to provide a service/learning project for

15 students. The students learned about the refuge system and mission and the management and public use Programs occurring at the refuge. In exchange, the students planted 600 tree seedlings provided by the National Tree Trust and removed tree tubes from trees planted in past years. Partners include: University of Wisconsin-Eau Claire and National Tree Trust. 5/30/99

Necedah Hosts IMBD Activities

Necedah National Wildlife Refuge

On May 8, the Necedah NWR hosted an open house for members of the community. Activities included an early morning bird identification hike, a slide presentation on cranes of the world, origami of migratory birds, and a demonstration on radio telemetry and information gathering on migratory species. The Friends of Necedah provided refreshments. The Friends also had their regular monthly meeting on that day to plan their involvement in refuge activities for the next month. 5/30/99

Detroit Lakes Festival of Birds a Success

Tamarac National Wildlife Refuge

The 3rd Annual Detroit Lakes Festival of Birds brought together approximately 700 people. Events included horse-drawn wagon rides, picnic supper, six field trips to area birding hot spots, workshops on landscaping for attracting birds and other wildlife, and bird identification, as

well as a wildlife craft and trade show, a banquet with well-known Minnesota naturalist, Stan Tekiela giving the key-note address and Programs for children and families at the Washington Square Mall in downtown Detroit Lakes. The event got high marks from participants, who filled out a questionnaire upon its conclusion. Partners include: Detroit Lakes Tribune, Detroit Lakes Regional Chamber of Commerce, Detroit Lakes Tourism Bureau, Becker Pet & Garden, Bremer Bank, Washington Square Mall (Detroit Lakes), and Best Western Holland House & Suites (Detroit Lakes). 5/30/99

Students Plant Trees on Trempealeau NWR

Trempealeau NWR

Trempealeau Refuge partnered with University of Wisconsin - Eau Claire and the National Tree Trust to provide a service/learning project for 15 students. The students learned about the refuge system mission and the management and public use programs at the refuge. In exchange, the students planted 600 tree seedlings provided by the National Tree Trust and removed tree tubes from trees planted in past years. Partners include: University of Wisconsin - Eau Claire's Residence Hall Environmental Group and Outdoor Recreation; National Tree Trust. 5/30/99

**Service Exhibits at
Homeschool Conference**
*Necedah National Wildlife
Refuge*

Refuge staff set up and staffed a display at the 16th Annual Wisconsin Parents Association Home School Conference and Curriculum Fair. First to third place finishers in the from the 1999 Wisconsin Federal Duck Stamp Art Contest was the focal point of the display. Over 700 copies of the Junior Duck Stamp Program booklet were distributed, including the ones requested by WPA for distributing at their upcoming district meetings. About 800 people had registered for the event. About 80 families signed up on the refuge offerings mailing list. The space cost was covered by the Washington Federal Duck Stamp Office, while the refuge covered salaries and transportation costs. The goal for this endeavor was to create an awareness in home school families of the Federal Junior Duck Stamp Program and the Necedah NWR. 5/30/99

**Litchfield Staff Assists
County with Beetle Rearing**
*Litchfield Wetland Manage-
ment District*

Litchfield Wetland Management District office is assisting Meeker county by providing our maintenance shop as a secure site for the county agricultural inspector to raise purple loosestrife leaf-eating beetles (*Galerucella* sp.); a cooperative, proactive effort that will benefit both agencies. There are only a few loosestrife problem areas in the county, to date, and they are on private lands. If the county can reduce

the spread of this species onto WPA lands, the District's cost of control will be significantly reduced. 5/30/99

**International Migratory Bird
Day Celebration**
*Shiawassee National Wildlife
Refuge*

On Saturday, May 8, the Green Point Environmental Learning Center hosted its annual International Migratory Bird Day Celebration from 10 a.m. to 2 p.m.. A guided bird hike along the trails kicked off the event. Boy Scout Troop 312 helped people construct a "tree branch" bluebird nesting box. A bird trivia contest that offered t-shirts as prizes attracted five teams. Michigan United Conservation Club's Wildlife Encounters presented a Program on "Michigan's Birds of Prey." The presenter brought non-releasable hawks, owls, and a falcon for people to see up close. 5/30/99

IMBD Partnering Effort
*Upper Mississippi River Na-
tional Wildlife & Fish Refuge-
LaCrosse District*

Several local organizations partnered to sponsor an International Migratory Bird Day at a local nature area. The event included birding hikes, coloring/tracing boards, Reebo the clown, live bird demonstrations, slide presentations on neotropical migrants, and drawings for kids and adults birding guides. Approximately 80 people attended the event. Partners include: Coulee Region Audubon Society, Friends of the Upper Mississippi River Refuges, Hixon Forest Nature Center, La Crosse Lions Club,

Upper Mississippi River Interpretive Association, La Crosse Premium Water 5/30/99

**Construction to Begin on Pool
6 EMP Project**
*Upper Mississippi River
National Wildlife & Fish
Refuge*

A pre-construction conference for the Bank Stabilization, Stage 3, Pool 6 EMP Project was held on May 6, 1999. Work will begin in June and will be completed by the contractor, Weymiller Marine, in late September. This project will preserve, restore and enhance backwater fish and migratory bird habitat on the Upper Mississippi River NW&FR by maintaining existing island shoreline, reducing and eliminating flow through breaches in existing islands. The project will protect 60 acres of habitat, including one existing bald eagle nest. Partners include: Department of the Army, Corps of Engineers, St. Paul District, Minnesota Department of Natural Resources Wisconsin Department of Natural Resources 5/30/99

**Reforestation to Reduce
Habitat Fragmentation**
*Crab Orchard National Wild-
life Refuge*

The Illinois Department of Natural Resources provided 52,250 tree seedlings valued at \$23,500. Several volunteers helped plant the trees. This spring, 165,875 hardwood tree seedlings were planted by a contractor, volunteers, and Refuge staff on 46 sites totaling over 342 acres. After five seasons of planting, a total of 344,000 hardwood seedlings

have been planted on 700 acres, completing Crab Orchard NWR's five-year restoration project to reduce forest habitat fragmentation. Many small (1 to 25 acres) openings within the forest were selected for reforestation to create larger, contiguous blocks of forest habitat favored by neotropical migrant songbirds and other wildlife species. A wide variety of hard mast producing species was planted to reestablish a biologically diverse forest community.

5/30/99

Refuge Celebrates IMBD at St. Paul's Como Zoo

Minnesota Valley National Wildlife Refuge

Despite a light morning drizzle and cool, overcast conditions, 17 volunteers and staff contacted more than 3,000 inner-city and diverse ethnic families who visited Como Zoo on International Migratory Bird Day, May 8. The event included exhibitors and live music for the first time, and about 750 children became "Winning Warblers" by gathering colored habitat dots from adults to complete a certificate of survival and claim a poster award.

5/30/99

Migratory Bird Day Celebrated at Sherburne NWR

Sherburne National Wildlife Refuge

Migratory Bird Day was celebrated at Sherburne NWR, May 15, 1999, with two guided bird tours attended by 30 visitors. Bob Janssen, author of *Birds in Minnesota*, and Jay Hammernick, retired refuge manager, led intermediate and experienced birders on a

"Songbird Search" on the Blue Hill Trail. While Refuge volunteer wildlife interpreters led beginning birders and families to the Wildlife Drive for a look at "Birds In The Wetlands". A total of 86 species were tallied. This event was co-sponsored by the Friends of Sherburne. Outreach efforts for Migratory Bird Day included the distribution of 200 posters to 27 schools in 5 school districts located within a 25-mile radius of the Refuge.

5/30/99

Necedah NWR Selected to Sponsor Conservation Crew

Necedah National Wildlife Refuge

Necedah NWR has again been selected as a work site sponsor for a Wisconsin Conservation Corp crew for one year beginning July 6, 1999. This is a job training program for young adults and will consist of four crew members and a crew leader. The crew will be completing surveys, banding waterfowl, constructing visitor facilities, setting up timber harvests, and clearing firebreaks. The refuge is joined this year by five other local land management organizations in the sponsorship. The crew labor is valued at over \$88,000. Partners include: Wisconsin Conservation Corps Board, Outdoors Forever, and Wisconsin Department of Natural Resources.

5/30/99

Successful Burn Season at Horicon NWR

Horicon National Wildlife Refuge

Ten separate burns totaling 580 acres were completed during the Spring of 1999. This was the first

time Mingo JCC fire crew assisted a refuge in completing prescribed burns. Several trained refuge volunteers also assist with the burns.

5/30/99

American Wetlands Month Celebrated at Mark Twain NWR

Mark Twain National Wildlife Refuge- Annada District

The Shaw Arboretum located near St. Louis, celebrated American Wetlands Month throughout May with numerous tours, workshops, and speakers. The centerpiece of this celebration was a 21-acre wetland complex completed in 1995 under a Partners for Wildlife agreement. An estimated 5,300 people participated in guided day and night tours, workshops, lectures, and presentations. Annada District staff also provided a variety of interpretive and educational materials. Service funding for the original project was provided by the Annada District and the Columbia Field Office. The Regional Sign Shop recently developed an interpretive sign that identifies and describes the project and Partnerships involved.

5/30/99

Migratory Bird Day Celebrated at Sherburne NWR

Sherburne National Wildlife Refuge

Migratory Bird Day was celebrated at Sherburne NWR on May 15 with two guided bird tours attended by 30 visitors. Bob Janssen, author of *Birds in Minnesota*, and Jay Hammernick, retired refuge manager led intermediate and experienced birders on a "Songbird Search" on the Blue Hill Trail while refuge volunteer wildlife interpreters lead begin-

ning birders and families to the Wildlife Drive for a look at "Birds in the Wetlands." A total of 86 species were tallied. Outreach efforts for Migratory Bird Day included the distribution of 200 IMBD posters to 27 schools in five school districts located within a 25 mile radius of the Refuge. A total of 30 people participated in the two guided bird tours offered at Sherburne NWR May 15 in celebration of Migratory Bird Day. 5/30/99

Record Year for Prescribe Burning at Fergus Falls *Fergus Falls Wetland Management District*

The Fergus Falls Wetland Management District burned a record 4,074 acres on 25 different burns. This record was achieved despite a two-week period when rain stopped us from doing any burning. Most of the acres burned were on the Waterfowl Production Area's but there were 3 areas where land-owners allowed us to burn, 1 area that the state helped burn and a 10-acre wildfire. 5/30/99

Horicon NWR Hosts Fishing Clinic

Horicon National Wildlife Refuge

In early celebration of National Fishing Week, Horicon NWR hosted a fishing clinic May 25, 1999, for more than 100 students, parents and teachers from Belle Reynolds Elementary School Oakfield, Wis., and 15 students with learning or emotional disabilities Washington Elementary School, Beaver Dam, Wis. The groups enjoyed 10 Pathways to Fishing learning stations at the visitor center in

the morning and fishing at three different marsh sites in the afternoon.

Partners include: Wisconsin Department of Natural Resources, Woods and Water Taxidermy, Leopold Wetland Management District, Beaver Dam Charter School, and several individual refuge volunteers.

5/30/99

Horicon Refuge Staff Produces Newsletter

Horicon National Wildlife Refuge

Refuge staff produced and distributed the 1999 edition of the "Redhead Gazette" to 700 outlets in Partnership with the Midwest Interpretive Association, Kaestner Design Studio, volunteer Sarah Congdon, and Fond du Lac Senior Center volunteers. The 12-page publication sports a new, refreshing look and includes photos because of Sarah's creative, talented design work. Articles were written by various employees on newsworthy subjects. Partners include: Midwest Interpretive Association, Kaestner Design Studio, volunteer Sarah Congdon and Fond du Lac Senior Center. 5/30/99

Horicon Marsh Bird Festival Takes Flight

Horicon National Wildlife Refuge

Horicon NWR helped sponsor the Horicon Marsh Bird Festival, May 7-9, 1999, in celebration of International Migratory Bird Day. The refuge sponsored a reception for local K-12 winners of the Wisconsin Federal Junior Duck Stamp contest. Seventy people enjoyed Tim Eisele's slide show called

"Ding's Darling" and a free drawing for prizes including a signed and numbered Jim Hautman print of his 1996 winning federal duck stamp. One of Horicon Marsh's very own claimed Wisconsin's best in show prize this year, Dan Koepsell of neighboring Waupun. The refuge also hosted "Wild Things!" wildlife activities for kids of all ages at the rustic Environmental Education Barn. With a focus on birds, youth dissected owl pellets, borrowed binoculars for guided bird hikes, enjoyed a marsh scavenger hunt. Other highlights during this march event included guided hikes, tours, field trips, demonstrations, talks, exhibits, and art displays. Approximately 132 species of birds were identified and about 2,000 people attended. 5/30/99

Search for Indiana Bat at Crab Orchard NWR

Crab Orchard National Wildlife Refuge

A highly skilled bat netting biologist from the Illinois Natural History Survey conducted a training exercise on Crab Orchard NWR May 5 and 6. Four other biologists and five individuals from Southern Illinois University participated in setting nets, conducting surveys, and sharing information during these two nights. The training exercise was in preparation for surveying efforts that will be conducted this summer to determine the presence/absence of endangered Indiana bats on the refuge. Although refuge lands

are within the species' range, and provide suitable summer habitat, it is unknown at this time whether the bats are present. Their presence will impact future forest management activities on the refuge. 5/30/99

Successful Burning Season at Windom Wetland Management District

Windom Wetland Management District

Windom Wetland Management District completed its most successful prescribed burning season to date despite reduced burning opportunities due to prolonged wet weather. Burns were completed on 23 Waterfowl Production Areas for a total of 3,280 acres. Two volunteers contributed 160 hours of assistance which enabled the staff to assemble a burn crew whenever favorable burn conditions existed. Prescribed burning assistance was also received from the U.S. Park Service's Buffalo Fire Use Module from the Buffalo National River at Harrison, Arkansas. This self-contained crew of prescribed burning specialists were able to independently complete four of the above burns for a total of 310 acres. 5/30/99

Biologist Assists Boy Scouts With Merit Badges

Windom Wetland Management District

On May 1, District Biologist Braastad served as an instructor for the Twin Valley Boy Scout Spring Conclave. He provided hands-on activities which enabled 155 Scouts to obtain Surveying and Conser-

vation Merit Badges. 5/30/99

Environmental Education for High School Students

Windom Wetland Management District

Windom Wetland Management District Biologist Braastad presented Environmental Education Programs on May 25 and 26 to a total of 63 area High School students. Programs emphasized importance of wetlands and the use of Geographic Information Systems (GIS) and Global Positioning System (GPS) technology for wildlife conservation. 5/30/99

Youth Learn Firearms Safety

Windom Wetland Management District

The Simulated Action Firearm Education Training for Youth System (SAFETY) was used by District staff to provide firearms safety training at the Martin County Ducks Unlimited Greenwing event on May 22, 1999, and to the Cottonwood County 4-H Shooting Sports club on May 26, 1999. A total of 176 young hunters received this valuable training. 5/30/99

Muscatatuck NWR Hosts "May Day" Bird Count

Muscatatuck National Wildlife Refuge

Muscatatuck NWR learned more about the status of bird species on the refuge through the field work of volunteers on the "May Day" bird count. Eight Refuge volunteers celebrated International Migratory Bird Day by finding 127 species of birds on the "May Day" bird count. 5/30/99

Muscatatuck NWR Hosts Field Day for Biology Students

Muscatatuck National Wildlife Refuge

One hundred high school students helped track copperbelly watersnakes and learned about wetlands, map reading, and national wildlife refuges at a field day at Muscatatuck NWR May 4, 1999. The students also donated approximately 90 hours of time to trail maintenance. 5/30/99

Tree Planting Day a Success

Upper Mississippi Refuge -LaCrosse District

On Friday, May 14, 108 second graders and 26 high school students from LaCrescent-Hokah Elementary/High School assisted the Upper Miss - La Crosse and U.S. Army Corps of Engineers in planting 550 saplings on a 1/4 mile section of old Highway 16. That section was removed last fall as part of the City of La Crescent's Shore Acres Road Improvement Project. The restored area and adjoining wetlands (about 5 acres) will become part of the Refuge through a land exchange between the City and the Service. The kids were quoted as saying "the best day of second grade!" The event was covered by two television stations and two newspapers. 5/30/99

Necedah Staff Readies Volunteer Housing

Necedah National Wildlife Refuge

A setup of a mobile home acquired through the Federal Emergency Management Assistance (FEMA) was

completed by the end of May 1999. The home provides volunteers and interns a place to stay during their volunteer period at Necedah NWR. Refuge staff and Wisconsin Conservation Corp members poured 18 yards of concrete for a slab to anchor the three-bedroom trailer the Refuge received from FEMA.. Utilities were also run from the annex building and connected along with metal skirting, a deck and two sets of steps. Local contractors connected electricity and LP gas. This project was started in mid-1998. Future plans are to construct a roof over the trailer and add-on a screen porch to accommodate volunteers. 5/30/99

Refuge Officers Assist Minnesota Valley Refuge

Litchfield Wetland Management District

Two refuge officers and one law enforcement special agent from St. Paul, Minn., united with the lead officer from the Minnesota Valley NWR to step up visitor contacts on the refuge May 22-23, 1999. Heavy rain and cooler temperatures significantly reduced public use over the weekend. Approximately 50 compliance checks were made, resulting in the issuances of six notice of violation (NOV) for fishing without a valid license and two NOV for fishing multiple lines.. 5/30/99

Litchfield Burn Season Ends Abruptly

Litchfield Wetland Management District

Advantageous April sunshine transitioned into too many unfortuitous May showers and an abrupt end to a promising beginning of another prescribed burn season. In just a little over one week, however, the Litchfield fire crew still managed to blacken 2,363 acres of native grassland on 13 Waterfowl Production Areas and a city park. A valuable Partnership was also established with the National Park Service's Buffalo Fire Use Module. 5/30/99

Service, State Tour Lower Illinois River With Joint Venture Managers

Mark Twain National Wildlife - Brussels District

Staff from the Illinois Department of Natural Resources' Mississippi River Area and Mark Twain NWR - Brussels District hosted a tour of the lower Illinois River for approximately 25 participants of the Upper Mississippi River and Great Lakes Region Joint Venture Management Board Meeting. The May 12th tour corresponded with the board's meeting at Pere Marquette State Park on May 12 and 13. The tour included a ride on the State's ferry boat from Hardin, Illinois to the Brussels Ferry Landing. Although rain kept the group under a tarp for most of the trip, the participants did get a glimpse of State and Service managed areas along this section of the Illinois River (including Swan Lake - a 2,600 backwater area which is the site of a multi-million dollar

Corp EMP project that is currently in the construction phase). 5/30/99

IMBD Celebrated at Minnesota's Como Zoo

Minnesota Valley National Wildlife Refuge

Despite a light morning drizzle and cool weather, 17 volunteers and staff contacted more than 3,000 inner-city and diverse ethnic families who visited Como Zoo on International Migratory Bird Day, May 8, 1999. For the first time, the observance included exhibitors and live music.. About 750 children became "Winning Warblers" by gathering colored habitat dots from adults to complete a certificate of survival and claim a poster award during the day. 5/30/99

Challenge Cost Share Program Benefits Bobolinks!

Wisconsin Private Lands Office

Through the Partners for Fish and Wildlife Program, 40 acres of tallgrass prairie and oak savanna are being restored on private land. Management activities include clearing brush, removal of tree rows that serve as predator travel corridors, prescribed burning, and prairie establishment. Connecting native habitats with surrogate grasslands, i.e. alfalfa hay, and delaying harvest of these surrogate grasslands provides quality nesting habitat for rare and declining grassland bird species. A recent site visit found at least 12 male bobolinks establishing breeding territories throughout the grassland complex. 5/30/99

First Ever Turkey Harvest Recorded at Baumann Waterfowl Production Area

Fergus Falls Wetland District

The Fergus Falls Wetland Management District had its first recorded turkey harvest on Baumann Waterfowl Production Area in Otter Tail county, Minn. The turkey was harvested during a special season and weighed 21 pounds. The bird was banded and records showed it was released in January 1998. It had been released 20 miles from where it was harvested. A Minnesota DNR employee said it was the farthest recorded migration for a banded bird. 5/30/99

Necedah Hosts Whooper Re-Introduction Meeting ***Necedah National Wildlife Refuge***

On May 20, Wisconsin residents had an opportunity to provide comments and ask questions on the potential whooping crane release at one of three proposed sites, the Necedah NWR/Meadow Valley State Wildlife Area. The meeting included displays provided by the DNR, Necedah Refuge, Friends of Necedah, and the International Crane Foundation. Local school children had colored pictures of whooping cranes and their footprints. A costumed crane parent mingled among the crowd and a local craftsman twisted balloons into crane hats. Dr. John Cannon presented a slide show on the recovery effort and gathered input via written survey forms on what the residents felt about the potential release site. Ninety-eight people including a congressional aid

from Senator Feingold's office, two radio and three newspaper reporters, and 19 support staff from the presenting agencies were at the Necedah School during the evening. 5/30/99

Night Investigation Hike Held At Necedah

Necedah National Wildlife Refuge

On May 20, Necedah hosted its first night hike of the season. Fourteen people attended the event and learned how to enhance their perception in the darkness. Students examined their everyday use of their senses and were provided an opportunity to imitate nocturnal animals in an attempt to understand these elusive creatures better. The goal of the hike was to help put people at ease with the darkness while enabling them to understand that their senses are quite capable of helping them to be secure in the night.

5/30/99

Refuge Hosts State Envirothon

Minnesota Valley National Wildlife Refuge

This year, Minnesota Valley NWR was selected for the State Envirothon, an outdoor and hands-on science competition for high school youth. Students took a 20 question quiz at five different stations. Stations were Wildlife, Soils, Aquatics/Water Quality, Forestry, and Prescribed Burning. After taking part in regional competitions the best five-person teams advanced to the State event. Peterson/Rushford School students were the proud winners and will advance to the

national competition. 5/30/99

NAWCA Small Grants Awarded

Joint Venture Office -

On March 17, 1999, the Migratory Bird Conservation Commission awarded five wetland habitat projects in Region 3 a grant through North American Wetlands Conservation Act (NAWCA) grants. This resulted in \$184,500 in federal grant funds going toward the protection, restoration and enhancement of 450 acres of wetland and upland habitat in Michigan and Wisconsin. The funded project names are: Huiras Lake Natural Area Acquisition, Lowney-Rohan Wetland Preservation Project, Superior Township Wetlands Acquisition, Mitchell Creek Preserve, and Silver River Watershed Project. Partners include: Keweenaw Bay Indian Community, Michigan and Wisconsin Departments of Natural Resources, Grand Traverse Regional Land Conservancy, Southeast Michigan Land Conservancy, Waupaca Co. Land and Water Conservation Dept., Ozaukee Washington Land Trust, Inc. 5/30/99

Lake Odessa Cabin Owners Unhappy With Water Levels

Mark Twain National Wildlife Refuge- Wapello District

Representatives from the Service, Iowa Department of Natural Resources, U.S. Army Corps of Engineers, Lake Odessa cabin owners, hunters, and fishermen met in a public meeting in Wapello, Iowa, concerning water levels in Lake Odessa. Cabin owners want the levels high for their

summer boating and fishing activities, government personnel and hunters want to lower water levels as soon as the river will allow to mimic the way the river was without the locks and dams. This would provide moist soil vegetative development in preparation for the fall migration. Nearly 200 individuals attended the three-hour meeting. 5/30/99

Illinois Fugitive Sentenced in Missouri Court

Mingo National Wildlife Refuge

Kenneth Warren was sentenced to seven years for vehicular manslaughter and seven years for theft from an incident that occurred in March 1998 on Mingo Refuge. Warren had escaped from a juvenile detention facility in Illinois, stole a truck, and caused a traffic accident on the refuge, claiming the life of a Puxico, Mo., woman. Warren fled the scene on foot and was apprehended by Refuge Officer Rod Hansen just minutes after the accident. Warren was initially charged with second degree murder, but the charge was dropped to manslaughter in exchange for a guilty plea. 5/30/99

Volunteers Participate in Necedah Crane Count

Necedah National Wildlife Refuge

Volunteers participated in the Juneau County Midwest sandhill crane count on the Refuge April 24, 1999. The annual census is sponsored by the International Crane Foundation. Necedah NWR had 10 volunteers donating 115 hours

with their training, scouting, and counting cranes. When the tallies came in after two hours in the marshes, 210 cranes were counted. The Friends of Necedah NWR provided refreshments after the count. Juneau County had additional volunteers counting cranes throughout the county. 5/30/99

Agassiz NWR Oak/Savanna Enhancement

Agassiz National Wildlife Refuge

Three Minnesota Conservation Corps enrollees spent four days May 10-13, 1999, girdling aspen and other non-oak species at Agassiz NWR. The group completed girdling trees in two 12-plus acre plots designated for oak/savannah habitat restoration. One plot is located immediately south of the maintenance shop the other is located on the east boundary immediately south of ditch 194. 5/30/99

Sixth Annual Regional Envirothon held at Agassiz NWR

Agassiz National Wildlife Refuge

Twenty three teams from nine schools in northwest Minnesota participated in the Envirothon held April 28, 1999, at Agassiz NWR. Two teams from Thief River Falls, Minn., took first and second place, and a team from Roseau finished third. The Thief River Falls team went on to State and took fifth place out of 30 competing teams. This was the sixth year the northwest regional Envirothon was held at the Refuge. Gary Tischer is the refuge coordina-

tor. Partners include: Minnesota Department of Natural Resources, Natural Resources Conservation Service, County Agricultural Extension Service and Thief River Falls Fire Department. 4/30/99

120 Acres Surveyed for CRP Wetland Restoration

Agassiz National Wildlife Refuge

Lori Wolff and Dennis Hall, Private Lands Office, St. Cloud and Dave Bennett, ROS, Agassiz NWR spent the week of May 17 surveying CRP (16th sign up) for wetland restorations. They completed surveying 45 wetlands in Marshall county. Results are as follows: 50 ditch plugs, 45 wetlands, 120 acres, 10 land owners and 15 contracts. About 600 acres remain to be surveyed. 5/30/99

Moose Calf Production Improves in Northwest Minnesota

Agassiz National Wildlife Refuge

Moose calf surveys were completed by PhD student Eric Cox May 28, 1999. After three days of flying to observe radio collared cows in the three study sites; 31 calves were spotted; with nine sets of twins. Calf production in Beltrami Island State Forest Area and Agassiz NWR was vastly improved over the previous several years. Results are as follows:

BELTRAMI: twins (3), singles (4), ST=7, 7 cows w/calves out of 14 collared.

AGASSIZ: twins (2),

singles(10), ST=12, 12 cows w/calves out of 20.

VIKING AG. AREA: twins (4), singles (4), ST=12, 8 cows w/calves out of 15.

Calf checks will continue this week, but peak of calving is over. Partners in the study include: Minnesota Department of Natural Resources, Universities of Idaho & Mass. Wildlife Forever, National Fish & Wildlife Foundation and Rice Area Sportsmen 5/30/99

District Assists Minnesota DNR With Annual Prairie Chicken Counts

Fergus Falls Wetland Management District

Chuck Vukonich and Jim Piehl assisted the Minnesota Department of Natural Resources on its annual Prairie Chicken counts. Several new booming grounds have been located next to Waterfowl Production Areas and it appears the prairie chicken is increasing its numbers in the southern portion of its range in Minnesota. 5/30/99

"EARTH SMART", Juried Art Show a Success

Minnesota Valley National Wildlife Refuge

"EARTH SMART" was the title of the first-ever juried art exhibit at Minnesota Valley NWR April 20 through May 31, 1999. Twenty-two environmental art works from various mediums were exhibited. The juried art show was coordinated by Kari Lennartson, a volunteer intern. Kari contributed sixty hours to this effort. Elizabeth Greenbaum, Bloomington Art Center, was

the juror. More than fifty visitors attended the opening reception held April 24, 1999. 5/30/99

Rod Sando Visits, Discusses Economic Impact of Waterfowl Production Areas

Fergus Falls Wetland Management District

Former Commissioner of the Minnesota Department of Natural Resources and Service consultant Rod Sando visited with the Fergus Falls Wetland Management District staff to discuss the economic implication of Waterfowl Production Areas on local communities as well as taxes. Several issues were discussed including the net gain of Duck Stamp dollars flowing into the state of Minnesota, overall flows of Federal and State dollars versus lost taxes in SWAP counties, the decreasing economic role of agriculture and increasing role of outdoor recreation. 4/30/99

Presentation for the Fergus Falls Fish & Game Club

Fergus Falls Wetland Management District

Chad Raitz from the Fergus Falls Wetland Management District gave a presentation at the Fergus Falls Fish and Game Club meeting. Discussed were projects that are currently being worked on and future projects that the Club may be able to help fund. There were 25 club members in attendance, the meeting was held at the Prairie Wetlands Learning Center. 5/30/99

Civil Service Job Seeker Seminar

Fergus Falls Wetland Management District

Chad Raitz from the Fergus Falls Wetland Management District gave a presentation on career opportunities with the Service to 100 people, most of whom were veterans. The presentation included a short history of hiring; the types of positions open within the agency; some of the qualifications, education and experience for different positions; how the openings are advertised; the application process; the selection process; and what summer jobs may exist. The seminar was presented by the Minnesota Workforce Center as a service to the veterans in our area. The seminar was held at the Fergus Falls VFW Club. 5/30/99

International Migratory Bird Day Celebration

Shiawassee National Wildlife Refuge

On May 8, 1999, 50 people braved the cool, rainy day to attend the International Migratory Bird Day Celebration at the Green Point Environmental Learning Center in Saginaw, Mich. Events included a guided bird hike, a bluebird nesting box building workshop, a bird trivia contest, and a live birds of prey program. 5/30/99

DeSoto's Museum Staff Help With Tornado Recovery

DeSoto National Wildlife Refuge
Bertrand Museum curator Sarah Tuttle and registrar Jennifer Stafford volunteered assistance, guidance, and emergency supplies to the local Historical Village which was damaged by

a tornado May 16. Several historic buildings were badly damaged necessitating the relocation of thousands of museum objects to secure storage. Although, the majority of the collection survived intact, some pieces were damaged by the heavy rains. Bertrand Museum staff and volunteers helped move objects and took two large, wet, textiles to DeSoto for conservation care. The museum staff's participation will be ongoing as the recovery process continues. 5/30/99

Agassiz Staff Present Studies at 35th North American Moose Conference

Agassiz National Wildlife Refuge

Staff from the Agassiz National Wildlife Refuge gave the following presentations at the North American Moose Conference at Grand Portage, Minn., May 15-20, 1999. "A Land Managers Perspective on Research," by Refuge Manager Margaret Anderson; "Refuge Biologist Gary Huschle presented "Decline of Moose Population in Northwest Minnesota," and "Moose Population Dynamics in Northwest Minnesota: An Interim Report." This was the first time a conference was held on a Reservation and was hosted by the Grand Portage Chippewa. 5/30/99

Necedah Visits High School Wildlife Class

Necedah National Wildlife Refuge

On May 17, 1999, Refuge staffer Jennifer Rabuck visited Mauston High School's Wildlife Class. The 40 students and two teachers viewed a slide presen-

tation and participated in a discussion on the world's crane species. Talk centered on threats to the cranes, habitat restoration efforts, basic biology and release programs for cranes. Students also examined the potential release of whooping cranes in Wisconsin and the issues surrounding such a release. 5/30/99

International Migratory Bird Day Summary

Squaw Creek National Wildlife Refuge

International Migratory Bird Day (IMBD) activities started during the beginning of the week with three local school groups visiting the Refuge for programs and outdoor classroom studies. A local television station, KQ2 from St. Joseph, Mo., visited the Refuge for a news report on IMBD events. Manager Bell was interviewed live on the morning news of KQ2 regarding Refuge activities and IMBD. Assistant Manager Speer gave a presentation to Kiwanis Club members in Oregon, Missouri discussing snow goose overabundance. Volunteers led guided tours and bird walks on the Refuge both Saturday and Sunday. 5/30/99

Twin Cities Audubon Group Bird in Northwest Minnesota

Agassiz National Wildlife Refuge

Twenty-five members of a Twin Cities Audubon group spent two days birding in northwest Minnesota May 22-23, 1999. The group spent the first day at Agassiz Refuge. A slide presentation on refuge research projects was given in

the evening in Holt, Minn. The local Agassiz Audubon Chapter helped arrange the tour and an effort was made to encourage the group to arrange lunches and meeting room rental in the rural communities surrounding the refuge, demonstrating that Birds Mean Business. 5/30/99

5,685 Grassland Acres Burned by Detroit Lakes Wetland Management District

Detroit Lakes Wetland Management District

The Detroit Lakes Wetland Management District burning crew prescribed burned 5,685 acres of prairie grasslands during spring 1999. Most of the burns were on District Waterfowl Production Areas; four burns were conducted on 354 acres of privately owned native prairie and a 560-acre burn was conducted jointly with the Minnesota Department of Natural Resources on a Wildlife Management Area. Burning stimulates prairie grass and forb growth, enhances prairie plant seed production, reduces wildfire potential by reducing the vegetation litter fuel load, recycles nutrients that are tied up in dead vegetation, and sets back encroaching woody vegetation. The result of prescribed burning prairie grasslands is better habitat for waterfowl, other migratory birds and numerous resident wildlife species. 5/31/99

Partnership Helps Hire Intern at Leopold Wetland Management District

Leopold Wetland Management District

The Partners for Fish and Wildlife Program, administered by the Leopold Wetland Management District, (WMD) hired a summer intern through a cooperative partnership with Wings Over Wisconsin, a state-wide conservation group. Amanda Schrank, a senior at University of Wisconsin-River Falls, will graduate in December with a Biology major and Conservation minor. Amanda assisted the District with many activities, including the restoration of 33 acres of Karner Blue grassland habitat and 13 acres of prairie grass restoration. Amanda was an intern with Horicon NWR during the summer of 1998. 6/7/99

White Pelicans Banded on Upper Mississippi River Refuge

Upper Mississippi River National Wildlife & Fish Refuge
Biologists from Upper Mississippi River NW&FR have teamed up with Dr. Al Grewe, St. Cloud State University, in the capture, banding, and color-marking of American white pelicans in western MN. Dr. Grewe has banded nearly 40,000 young pelicans over a 20+ year period. Eric Nelson, Refuge Biologist and his wife, accompanied Dr. Grewe's crew to Marsh Lake, Lac Qui Parle County, on June 19, 1999 and attached patagial wing tags on 198 of 2,000 young pelicans banded. The flightless young are hatched and raised on an isolated island in Marsh Lake. Adult pelicans are using the

Refuge in increasing numbers. The summer occurrence of non-breeding American white pelicans on the Refuge is a rather recent phenomenon, since the 1980's the "summer" population on the River has reached nearly 1,500 birds. The natal origin of these birds is not known, but some of these birds probably were raised in western Minnesota at Marsh Lake. The Refuge is conducting a three-year project studying the number and distribution of white pelicans using the Refuge. This study will be greatly enhanced with the ability to identify individual birds. It is quite likely that white pelicans could begin nesting on Refuge islands during the next few years. Pelicans could soon receive public scrutiny as fish eaters similar to that of the double-crest cormorant here in the Great Lakes Region. Also, documentation of white pelican use of the river will enhance our ability to address pelican issues as they develop. Partners include: St. Cloud State University Minnesota Department of Natural Resources-Area Wildlife Office. 6/19/99

260,000 Flea Beetles Collected to Control Leafy Spurge

Fergus Falls Wetland Management District

For the second year staff members at the Fergus Falls Wetland Management District (WMD) traveled to North Dakota to collect Leafy Spurge Flea Beetles. The successful collection netted 260,000 flea beetles which were later released on 11 Waterfowl Pro-

duction Areas (WPA) across the five county district. This is the second year of releases on the WMD, with last years releases showing very good response at their sites. With luck there will be harvestable populations of beetles to locate to other areas infested with leafy spurge. Partners include Ward County North Dakota Weed Control Office. 6/24/99

Agassiz Breeding Bird Point Counts Hampered by Weather

Agassiz National Wildlife Refuge

Poor weather resulted in an incomplete breeding bird point count during spring 1999. This year was the seventh year that Breeding Bird Point Counts were conducted on the Refuge. Forty-five of 85 planned points were completed in targetted shrub/scrub; none of the 50 points scheduled in cattail habitat were completed. Most points were GPS located for future reference. All 1998 and 1999 data were entered in the new CENSUS program for analysis. 6/30/99

District Staff Collects Leafy Spurge Flea Beetles

Fergus Falls Wetland Management District

For the second year staff members at the Fergus Falls Wetland Management District traveled to North Dakota to collect Leafy Spurge Flea Beetles. The collection efforts were very successful with the retrieval of 260,000 Flea Beetles. The beetles were released on 11 Waterfowl Production Area's across the 5 county district. This is the

second year of releases on the Wetland Management District, with last years releases showing very good response at their sites. With luck there will be harvestable populations of beetles to locate to other areas infested with leafy spurge. 6/30/99

Eighth Annual Family Fishing Fair

Mark Twain National Wildlife Refuge - Brussels District

Youngsters from seven Illinois counties and seven states attended the eighth annual Two Rivers Family Fishing Fair in Pere Marquette State Park. Designed to introduce and promote fishing as a family-oriented pastime, the fair had eight hands-on stations designed to teach the basics of fishing. Subjects such as knot tying, fish identification, casting, and equipment were demonstrated by Service and Illinois Department of Natural Resources personnel as well as 76 volunteers. Seven hundred and fifty youngsters registered and visited each station. 6/30/99

900 Summer School Students Visit Mingo NWR

Mingo National Wildlife Refuge

Twenty school groups of approximately 900 students descended upon Mingo NWR in June to participate in environmental education classes sponsored by the refuge. Rod Hansen completed the majority of the instruction and activities for the students with assistance from weekend receptionist Monica Siler and Job Corps Environmental Education instructor Bridget Jackson. Students received education on the

hardwood bottomland swamp, wetlands, agriculture, migratory birds, endangered species, the National Wildlife Refuge System, and various other topics as desired by individual school educators. Missouri has implemented a strong summer school Program to advance talented students while providing opportunities for other students to make up for deficiencies. Mingo NWR provides an excellent outdoor classroom for area schools to participate in. 6/30/99

Service Active in Chippewa County Envirothon

Fergus Falls Wetland District

The Service had presenters at two stations at the Area II Envirothon at Chippewa County Park in Grant county. The envirothon consists of six stations where the students are tested at wildlife, a current topic (which was wildfire management), soils, forestry, wetlands and aquatics and oral presentations. Each school ends up with a final score and the top three scores go to the state envirothon to compete. There were approximately 108 students who participated. It is a great opportunity for environmental education. This was the fifth year for the Area II envirothon. Partners include: Minnesota Department of Natural Resources, Soil and Water Conservation Districts from Stevens, Pope, Grant, and Douglas Counties, Natural Resource Conservation Service from Stevens, Grant and

Traverse Counties and several other individuals and agencies. 6/30/99

Shiawassee Sponsors Kid's Free Fishing Day

Shiawassee National Wildlife Refuge

A total of 182 children up to 16 years old registered for the Kid's Free Fishing Day, held at the Saginaw Field and Stream Club Lake. Each registrant was given a free gift of fishing tackle items, and the youngest children received a toy. Every 30 minutes a name was called out for a child to win a free door prize, and prizes were awarded for the largest fish for boys and girls. The children also were able to visit with "Perky" perch, and helped us release some stocked fish into the lake. At the end of the 4-hour event, the rest of the prizes were distributed, including fishing gear, nets, balls, bicycles, Detroit Red Wings hockey jerseys, T-shirts, sleeping bags, tents, and outdoor game kits. A total of 30 Saginaw Field and Stream Club volunteers helped us with this event, along with 1 Service volunteer and 5 refuge staff. The weather cooperated and everyone had a great day. Partners include: Saginaw Field and Stream Club, Mason Tackle Company, Fishing Tackle Grab Bag, Garber Buick-Saginaw, Wickes Lumber-East, Lightning Printing, Universal Sign Company, A.T. Frank Company, Red Wing Shoes-Bay Road, Dick's Sporting Goods, Martin Chevrolet, Ward Building Products, and ABO Tent Events. 6/30/99

Wisconsin Federal Jr. Duck Stamp Best of Show Honored *Necedah National Wildlife Refuge*

Refuge staff and Wisconsin Waterfowl Association (WWA) Board Member Jeff Bord presented recognition awards to Dan Koepsell for his Wisconsin Federal Junior Duck Stamp Best of Show artwork during the Awards Night at Waupun High School. About 150 people were in attendance. On June 1, Dan Koepsell, Waupun, Wis., was recognized for winning Best of Show in the Wisconsin Federal Junior Duck Stamp Art judging. Koepsell received a framed photo enlargement of his winning artwork and a limited edition print of a federal duck stamp. About 150 people attended. 6/30/99

District Manager Answers Concerns About Goose Depredation

Fergus Falls Wetland Management District

District Manager, Brennan, had an interview with Kip Heinz of WDAY TV, Fargo, North Dakota, regarding goose depredation complaints. The interview consisted of questions and answers about the growing local goose population and the conflicts with property owners and depredation problems that arise. They discussed the current Program for harvesting local birds and the potential impacts to the Eastern Prairie Population (EPP) of Canada Geese that breed farther north but migrate through. They ended the interview with ways to prevent depredation through fencing, flagging, etc. The interview was aired during 5 and 10 p.m. news casts. 6/30/99

Necedah NWR Opens Trails as Part of National Trails Day *Necedah National Wildlife Refuge*

Necedah NWR opened a portion of its refuge not normally available to visitors in observance of National Trails Day. Staff were available to answer questions, provide maps and suggest wildlife viewing spots. Twenty-four visitors stopped into the office for information, while others simply enjoyed the "open" refuge. The office was open and staffed to orient visitors and provide them with maps and information. 6/30/99

Conservation Students Tour DeSoto NWR

DeSoto National Wildlife Refuge
Senior students majoring in natural resources management from the University of Connecticut and biology instructors from throughout the United States toured the refuge. Refuge staff hosted 18 natural resources majors from University of Connecticut May 27, 1999, and 12 biology instructors from throughout the United States June 1, 1999. Both groups toured the visitor center and museum, and refuge learning about the refuge's public use programs, low-input sustainable crop program, grassland reconstruction and maintenance program, moist soil management, DeSoto lake fishery, and how channeling and diking the Missouri river altered the river valley's ecology. 6/30/99

Angling for Fun at Necedah NWR

Necedah National Wildlife Refuge

Necedah NWR hosted its second annual "Angling for Fun" celebration honoring National Fishing Day June 12, 1999. Activities included a casting contest for kids, open fishing on Goose Pool, complimentary lunch, adult seminars, and a look into fisheries research techniques. Additionally, visitors were able to learn *gyotaku*, the Japanese art of fish printing. Six area sporting goods shops donated contest prizes and door prizes. 46 people attended the event. An area radio station interviewed staff and aired the Angling for Fun information throughout the day. 6/30/99

Eaglets Placed in Artificial Nest

Upper Mississippi River National Wildlife & Fish Refuge-McGregor District

Storms blew down one of the 50 active eagle nests in the McGregor District, stranding two eaglets on the downed tree due to high water. Based on continued parental care of the chicks, District staff decided to construct a new nest in a nearby tree. One chick that had a broken wing underwent surgery at the Raptor Center in the Twin Cities and will likely be returned to the nest within the week. The other chick is healthy and being attended by the adults. A local news release covered the rescue. 5/30/99

Scoutreach Day Camp

Shiawassee National Wildlife Refuge

Over 200 hundred boys and girls, aged 5-14 years old participated in the "Scoutreach Day Camp" on June 15-16, 1999, at Ojibway Island in Saginaw, Mich. The annual event is coordinated by the Lake Huron Area Boy Scout Council and involves many agencies and organizations. The camp is designed to reach inner-city youth and let them experience different activities to get them interested in either Boy or Girl Scouts. Staff and volunteers from Green Point Environmental Learning Center led the nature portion. Children explored the waters around the island for aquatic life using nets, cups, and even their hands. Partners include: Lake Huron Area Boy Scout Council, Girl Scouts, Saginaw Fire and Police Departments, Saginaw Valley State University, Tri-City Woodcarvers, Saginaw City School District, Consumers Energy, Mid-Michigan Bucs Soccer team, Saginaw Gears Hockey team, The Saginaw News and local artists. 6/30/99

Mingo NWR Hosts Youth Fishing Clinic

Mingo National Wildlife Refuge

Approximately 100 youths attended a "Pathways To Fishing" clinic put on at Gritman Lake on Mingo National Wildlife Refuge. Refuge staff, numerous volunteers and representatives from several surrounding agencies assisted Mingo to attend eight different stations involved with the clinic. Youth

learned about knot tying, use of baits, aquatic conservation, ethics, fish identification, how to weigh and measure fish, and properly handling fish to name a few. Each youth was given a "scorecard" that was initialed each time he/she visited a station. When the card was completed it was turned in at the registration desk for a t-shirt and other promotional items. Gritman Lake was also stocked with channel catfish three weeks prior to the clinic. The fish catch was down slightly this year from previous years, but many kids still caught a healthy supply. 6/30/99

Summer Discovery Camp for Kids

Shiawassee National Wildlife Refuge

Twenty-seven children, aged 5-12 years old participated in the annual Summer Discovery Camp for Kids at the Green Point Environmental Learning Center on Saturday, June 19, 1999. Several parents, grandparents, and younger siblings also participated. The children learned about the life on a National Wildlife Refuge through a variety of fun, hands-on activities. Three refuge staff members and four volunteers led the children in the various activities with topics covering historical Native American use, prairie insects, forestry, and predator/prey relationships. The Women's Farm and Garden Club donated plants for the children to take home. 6/30/99

Leafy Spurge Attack Continues at Trempealeau NWR

Trempealeau National Wildlife Refuge

Approximately 71,500 leafy spurge beetles were collected from insectories on Trempealeau NWR allowing establishment of 16 new spurge control sites on the Refuge and 19 sites in other locations in Wisconsin. Crews from LaCrosse District, Fort McCoy Military Reserve, and Wisconsin Department of Highways helped collect the beetles and released them in their respective areas. Refuge volunteers and other staff assisted with collection and sorting and site establishment on-refuge. 6/30/99

Minnesota Valley Receives Grant to Restore Wetlands

Minnesota Valley National Wildlife Refuge

Minnesota Valley National Wildlife Refuge received a Clean Water Action Plan Funds (CWAP) grant to restore 15 wetlands for a total of 55 acres in the Minnesota River Watershed by Fiscal Year 2000. The purpose of the project is to provide habitat for wetland dependent species. This will be accomplished by stabilizing eroding streambank, thus preventing further soil loss; establishing a native vegetative corridor with woody species; restoring a diverse class of wetlands; and fostering new Partnerships with various entities. Wetland restorations will include tile breaks, earthen dams, and control structures. Streambank restoration will be accomplished via bioengineering practices and

include reshaping and resloping; rootwads; tree revetments; and revegetation of native species. The aforementioned practices will provide habitat for waterfowl, songbirds, and fish and also improve water quality. **Acres/Miles of Habitat Restoration:** This initiative includes the restoration of 55 acres of a diverse class of wetlands and 450 feet of eroded streambank. This project involves the cooperation of more than 20 individual landowners and seven different organizations. Federal Trust Species Benefitted: Restoration activities will provide habitat for migratory waterfowl, neotropical migrants, herptiles, and aquatic invertebrates. Partners include: Minnesota Waterfowl Association, Various Wildlife Clubs and Metropolitan Council. 6/30/99

Swamp Ecology Course for Teachers

Cypress Creek National Wildlife Refuge

Twenty educators from area schools and agencies attended the Swamp Ecology course. The course was initiated by the Refuge as a pilot Program to introduce teachers to the Cache River Wetlands. A 3-day Swamp Ecology course was held for 20 participants in the Cache River Wetlands/Cypress Creek NWR. The course targeted teachers and included activities and information about wetlands and the diversity of life that lives within the area. Participants were involved with inter-disciplinary activities that were conducted in the field and in the classroom. The course was offered for 2 grad. credits

and material was provided by the Missouri DOC and the Refuge. Teachers received a variety of resources including the Cache River Wetlands Educator's Guide. Partners: Missouri Department of Natural Resources, The Nature Conservancy, Illinois Department of Natural Resources, Regional Office of Education, and Shawnee College. 6/30/99

Upper Mississippi Boat Landing Maintenance

Upper Mississippi River National Wildlife & Fish Refuge
Approximately 400 cubic yards of sand were dredged from the Lower I-90 landing, two rock groins were created and 10 cubic yards of gravel were added to a shoreline fishing area to increase access. The Lower I-90 Boat Landing received significant maintenance during the first week of June. The U.S. Army Corps of Engineers was contracted to dredge approximately 400 cubic yards of sand from the ramp and dock area at the landing. Six 100-ton rock rip rap was used to create two rock groins to reduce sand movement in the bay, and also provide additional protection to the main channel shoreline. An additional 10 cu. yards of gravel was placed in the rip rap to provide access to the shoreline for fishing. The wheelchair accessible transfer dock also received a new anchoring system that hopefully will withstand the rigors of shifting ice flows. Funding for this \$15,000 project was provided through the remaining 1997 flood fund. 6/30/99

Swan Lake NWR Hosts Fishing Clinic

Swan Lake National Wildlife Refuge

Forty Children and 10 adults participated in the Swan Lake's Fishing Clinic June 9, 1999. Swan Lake staff were assisted by staff from the U.S. Department of Agriculture, Missouri Departments of Conservation and Natural Resources. Students participated in five rotating sessions consisting of water safety, casting, baiting, fishing, and fish printing on T-shirts. Lunch was served and fun was had by all. Several fish were caught, an outdoor lunch was served and a good time was had by all that attended. Each participant went home with an educational packet and a T-shirt made during the clinic. 6/30/99

Refuge Hosts Youth Fishing Day

Big Stone National Wildlife Refuge

Eighty-five youth and about 50 adults participated in a Youth Fishing Day hosted by Big Stone NWR and the Minnesota Department of Natural Resources in celebration of National Fishing Week. The youth rotated through several organized stations on various fish associated activities such as fish identification, casting, knot tying and fish printing. Though few fish were caught no one went home empty handed as each participant received a grab bag full of fishing paraphernalia and activity booklets, and a T-shirt donated by a local business. Lunch was also provided compliments of the Jaycees. Partners include: Minnesota Department of Natural Resources-Fisher-

ies, Ortonville JCs, Bud's Bait, Pepsi of Ortonville, Schmidt's Landing/Pro's Choice Tackle, Big Stone Lake Area Chamber, Chamberlain's Sporting Good's & Men's Wear, Sonny's Color Printing, and Odessa Rod and Gun Club. 6/30/99

Minnesota Valley NWR Completes 99-Acre Restoration

Minnesota Valley National Wildlife Refuge

Minnesota Valley national Wildlife Refuge completed 99 acres of habitat restoration on Erin Prairie Waterfowl Production Area in Rice County. The restoration includes 16 acres of seasonal and semi-permanent wetlands and approximately 74 acres of native prairie. The restored tract is located next to a 250 acre WMA and will provide excellent pair, breeding, and migratory habitat for waterfowl. Restoration of this tract was made possible through Partnerships from Metropolitan Council, NAWCA Grant, and contributions from various local sportsman clubs. 6/30/99

Night Hike Held at Necedah NWR

Necedah National Wildlife Refuge

Community members participated in guided night hike and presentation. Forty-one participants had the opportunity to use their senses in a night-time setting and compare nocturnal adaptations to those of diurnal creatures. Activities included an in depth look at human eyesight, hearing and sense of smell as compared to the animals that are active at night. Participants topped off

the hike with a solo experience, spending time alone in the night with their newly acquired confidence. The group included a cub scout troop from Tomah, and citizens from as far away as Madison. 6/30/99

Chief of Division of Refuges Tours Windom WMD

Windom Wetland Management District

The Windom Wetland Management District hosted a tour on June 23 for Jim Kurth, Chief of the Division of Refuges, Janet Tennyson, Outreach Coordinator, and Eric Eckl, Public Affairs Specialist, all from the Washington Office. Don Hultman assisted with the tour which was designed to provide visibility and increase awareness of the Small Wetlands Program. 6/30/99

Leafy Spurge Beetles Flourish

Windom Wetland Management District

Only two years after introducing flea beetles (*Aphthona* spp.) to the Timber Lake Waterfowl Production Area for biological control of leafy spurge, a relocation was possible. Flea beetles raised on the Waterfowl Production Area have increased to the extent that some were relocated to private land in Cottonwood County to begin combating a long-standing spurge site. Minnesota Department of Agriculture personnel assisted in this release which occurred on June 25. 6/30/99

Master's Program Teachers Visit Necedah

Necedah National Wildlife Refuge

A group of 13 teachers in a Master's Degree program attended a field trip of the savanna restoration sites on the Necedah NWR June 25. Refuge staff led the group of secondary education teachers to various spots on the refuge showing the stages of savanna restoration. The group was able to see savanna birds and endangered Karner blue butterfly chrysalisi. 6/30/99

Osprey Hatch at Necedah NWR, First in 25 Years

Necedah National Wildlife Refuge

On June 18, Bio Tech Olson observed two osprey nestlings moving about in the nest located on the Rattail Ditch in the Sprague Mather Flowage. This is the first successful osprey nesting activity in over 25 years. 6/30/99

26 Acres of Agricultural Land Gets Hardwood Plantings

Muscatatuck National Wildlife Refuge

Twenty-six acres of land on Muscatatuck NWR were removed from agricultural program and planted with hardwood seedlings to reduce forest fragmentation. The project included 8,700 seedlings and was administered jointly with Ducks Unlimited. The project was funded by Cinergy in exchange for carbon credits. 6/30/99

Breeding Bird Survey Completed in Refuge Prairie.

Big Stone National Wildlife Refuge

Forty-eight point counts were completed to survey breeding birds on Big Stone NWR's remnant prairie tracts. Bob Janssen of the Minnesota Ornithologists Union and staff Biologist, Olson completed forty-eight point counts in Big Stone NWR's remnant prairie tracts to survey breeding birds. Sixteen points per day were completed, June 8-10. Sixty-four species were detected by the point counts. Two State Listed Species of Concern were detected, the American White Pelican and the Upland Sandpiper. Though the Pelican is a non-breeder on the Refuge, an upland sandpiper nest with four eggs was found. Eight Region 3 Priority Species were detected; wood duck, mallard, blue-winged teal, American woodcock, black tern, sedge wren, grasshopper sparrow and bobolink. The point counts allow us to monitor population trends and provide evidence on effects of management actions on grassland nesting birds.

6/30/99

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Presentation to NCTC Class at Prairie Wetland Center

Agassiz National Wildlife Refuge

Margaret Anderson gave a one-hour presentation titled, "Education Programs for Youth: After School, Weekends, and Summers" to a NCTC training class June 8, 1999.. The presentation focused on outreach as a result of refuge research projects. There were 12 participants and 3 instructors in attendance. 6/30/99

District Develops Agreements With Rural Fire Departments

Litchfield Wetland Management District

Cooperative fire protection agreements were ratified with the Freeport and Green Lake fire departments for wildfire suppression on Waterfowl Production Areas (Waterfowl

Production Area) in Stearns and Kandiyohi counties, respectively. Due to the beneficial fire effects on grassland habitats, suppression assistance is rendered only under threat to adjacent private property. Thus far, a total of 5 wildfires encompassing 245 acres were suppressed on District Waterfowl Production Areas by local fire departments, all in the month of April. Arson has been identified as the cause of ignition in each case. 6/30/99

Eastern Prairie Fringed Orchid Recovery Leopold Wetland Management District

While listed federally as "threatened," the eastern prairie fringed orchid (EPFO) is listed as an endangered species in Wisconsin. Surveys conducted by Leopold Wetland Management District (WMD) staff and Garden Club of America volunteers, recently discovered 76 new EPFO plants at the Uihlein Waterfowl Production Area. Fourteen plants were discovered there last year, bringing the total EBFO population to 90 plants. 7/12/99

Annual National Fishing Day a Huge Success

Upper Mississippi River National Wildlife & Fish Refuge

Upper Mississippi River National Wildlife and Fish Refuge held its ninth annual National Fishing Day event June 5, 1999 in Winona, Minn. Headquarters and Winona District coordinate the event with help from the La Crosse Fishery

Resources Office, the Regional Sign Center and Trempealeau National Wildlife Refuge. Sixty children, ages 6 through 12, arrived before 8 a.m. looking forward to a day of fun and fishing. Half the kids fished at a local trout pond, sponsored by Trout Unlimited and half fished the Mississippi river backwaters from boats with experienced anglers. A group of 30 adults with disabilities participated in our Fishing Day. We provide a large, handicapped accessible pontoon, which remains docked at shore, with volunteers to assist and make the day a fun and enriching experience for everyone. The participants enjoy this annual event immensely and look forward to it every year. At noon we serve a hot lunch provided by the Friends of the Upper Miss. This event provides a worthwhile experience for youth and people with disabilities in the local community. For many, this day provides the only opportunity for fishing or experiencing the Mississippi River. It also provides the opportunity to expand good public relations between the Service, our many Partners and the community. Partners include: Friends of the Upper Mississippi River Refuges, Winona County Sheriff and Deputies, Winona County Dive and Rescue Team, Trout Unlimited, St. Mary's University, Winona Sportsmen Club, Coca-Cola Company, Tom Thompson-County Market, Winona County Community Education, La Crosse Fishery Resource Office, Upper Mississippi River NWFR Winona District Regional Sign Center and

Trempealeau National Wildlife Refuge. 6/30/99

Hitting the Trail: A Camping Primer

Shiawassee National Wildlife Refuge

The Green Point Environmental Learning Center hosted its monthly First Wednesday Discovery Series Program titled, "Hitting the Trail: A Camping Primer," and attracted 25 people. Two sales associates from the Saginaw Gander Mountain Store brought in various camping equipment to show to people. Staff from Green Point demonstrated several different kinds of knots and other rustic gadgets that can be used when camping. 6/30/99

Inner City Youths Participate in Fishing Day

Minnesota Valley National Wildlife Refuge

Youth Fishing Day reached over 300 people, 130 inner city youth attended the event in the morning. Each youth was furnished with a new rod and reel. A complete walleye was served to more than 150 people. More than 160 people attended the afternoon session. Over 50 volunteers from the refuge helped out with the event. Twelve regional office employees and eighteen refuge employees staffed the event. Youth Fishing Day at Minnesota Valley celebrates National Fishing Week. This is an all-day event at the Bass Ponds that focuses on fishing education, ethics and safety. The morning session is targeted to 100 disadvantaged inner-city youth and the afternoon is open to the public. A walleye lunch

is provided for the morning group and all the staff and volunteers. The fishing was good! Partners include: Bureau of Indian Affairs, Red Lake Department of Natural Resources, 1854 Authority, Holiday Inn, Burger Brothers, Outdoor Outfitters, and Cypress Semi Conductor Corporation. 6/30/99

Iowa River Partnership Celebrates Wetland Restoration Milestone

Mark Twain NWR- Wapello District

Partners who banded together to establish the Iowa River Corridor Project were honored at the Wetland Conservation Milestone Celebration June 30, 1999, in Amana, Iowa. Guests included representatives from the Natural Resources Conservation Service, Iowa Department of Natural Resources, U.S. Geological Survey, landowners, community leaders, and members of the Corridor nonprofit organization. The event celebrated the six years of hard work and resource successes following the 1993 floods; resulting in the establishment of 12,000 acres of floodplain easements and 10,000 acres of acquired land under the National Wildlife Refuge System within the 50,000-acre Iowa Corridor Project Area. Staff from offices of Senator Charles Grassley office and Congressman Jim Nussle also attended. 6/30/99

Heavy Public Use Precipitates Added Enforcement on Winona District

*Upper Mississippi River
NW&FR- Winona District*

Increased public use during the summer months have prompted Refuge staff to increase its law enforcement presence on the Upper Mississippi River National Wildlife and Fish Refuge. Non-enforcement staff were called upon to provide Service presence on the Refuge, providing regular weekend patrols, particularly on the Winona District. The increased presence has resulted in numerous contacts with Refuge visitors. Upper Miss. Refuge experiences tremendous numbers of visitors during summer weekends. Public use activities include boating and related water sports, fishing, and camping on Refuge islands, sandbars, and beaches. Partners include the Buffalo County Sheriff's Office. 7/1/99

Detroit Lakes Dedicates New Jim Sieh Waterfowl Production Area

Detroit Lakes Wetland Management District

More than 60 people attended the dedication of the 160-acre Jim Sieh Waterfowl Production Area (WPA) at Detroit Lakes Wetland Management District July 7, 1999. The WPA includes a new water control structure that helped restore a 14-acre drained marsh. The marsh is a compliment to 13 other smaller wetlands on the WPA and will provide nesting and brood rearing habitat for several waterfowl species. Ducks Unlimited invested \$25,000 to fund the restoration project

and was recognized for their contribution at the dedication ceremony. Federal Aid Team Leader Bud Fuchs provided the keynote address on Jim Sieh's 39 years of dedicated service to wetland preservation and the wildlife field. Congressman Collin Peterson's Aide Sharon Josephson and members of the Buffalo/Red River Watershed District attended. 7/8/99

Two-Day Girl Scout Day Camp at Necedah NWR

Necedah National Wildlife Refuge

The Woodland Council of Girl Scouts joined with Refuge staff to host a day camp for about 51 girl scouts on Necedah NWR July 7-8, 1999. This was the first year that the refuge was the site for this activity. An orientation/teacher workshop was held at the refuge for the scout leaders on 7/1. Refuge Volunteer and Friends member Ruth Kies served as Camp Director. Camp activities included orienteering, birdhouse making, fishing, a plant scavenger hunt canoeing environmental games and making plaster casts of a wolf print. Refuge staff also escorted the Scouts on a hike through the refuge. During the hike they learned about radio-telemetry. Several tracking activities, including actually collaring one of the girls so the others could track her made the learning more fun. Jody Kibler, a reporter from the Star Times newspaper visited the camp July 8, and produced a feature story on the event for the paper's July 14 issue The Woodland Council includes girl scouts from portions of nine

Wisconsin counties. 7/8/99

Necedah NWR Staffs Booth at Fair

Necedah National Wildlife Refuge

Refuge staff manned an information booth highlighting Necedah NWR, its activities and events during the Monroe County Fair at Tomah, Wis., July 7-11, 1999. The booth was staffed from noon to 10 p.m. daily. Over a thousand people toured the building that housed the Refuge display. Refuge staff talked with over 500 visitors, distributed leaflets and brochures, and added another 150 names to the refuge mailing list. Local radio station WBOG interviewed Refuge staff about Refuge programs. 7/11/99

First Annual Wild Berry Bash at Necedah NWR

Necedah National Wildlife Refuge

More than 135 visitors participated in the 1st Annual Wild Berry Bash held at the Necedah NWR. July 17, 1999. Activities included a discussion and tour on berries and wildlife, a cooking contest, tie-dyeing with natural dyes, a pie-eating contest and a scavenger hunt. The visitors were also treated to the appearance of "Barry Berry" played by John Arciszewski, a Friends group member, who handed out blueberry balloons to young and old during the day-long event. The Friends of Necedah assisted refuge staff and provided prizes and ribbons for the event. 7/17/99

Refuge-Sponsored Camp Introduces Minorities to Natural Resource Careers

Mingo National Wildlife Refuge

Staff at Mingo National Wildlife Refuge joined with other natural resources agencies to coordinate the Natural Resources Career Camp (NRCC), a two week camp for minority students that exposes them to outdoor activities and career opportunities in Natural Resources. Rod Hansen, assistant Refuge manager, worked with representatives of the U.S. Forest Service, Natural Resources Conservation Service (NRCS) and the Missouri Department of Conservation (MDC) to organize the camp and provide instruction. The NRCC is a three-year program held at the University of Missouri Forestry Camp, located just minutes from the Refuge. New high school sophomores spend their first two summers at the camp receiving instruction from resource managers. Their final year is spent on the campus of Lincoln University. African and Asian American students, joined Native American students from throughout Missouri at the camp. Approximately 40 students participated. Rod Hansen facilitated CPR and first aid certification for new students and gave a four-hour joint presentation on natural resources law enforcement. Hansen also coordinated two day-long programs on identification of trees and wetlands assisted by Charlie Shaiffer, Refuge biologist. Hansen also coordinated a wildlife biology

and management seminar at the Refuge which involved taking the students along on an actual deer survey.

Students also spent one weekend on a camping and canoe trip down the Caster river. While the first-year class learned canoeing basics in a shallow pond, the second-year class was led on a four-mile ride down the river to only a few miles north of the Refuge. During the trip, students learned how to pitch tents, to fish, and how to properly prepare and preserve food for camping outings. Students also got a day-long class on the National Wildlife Refuge System, which included an extensive tour of Mingo NWR, and classroom activities. Hansen also led the students on trips to Missouri state parks, introducing them to park managers. The final day of camp was a career day. Mingo NWR invited representatives from various natural resource agencies to deliver presentations on potential careers for students. Other classes taught by other Resource professionals, included surveying, compass and map reading, fisheries management, a five-mile hike, geology and irrigation management. Mingo NWR contributed \$5,000 to support the camp in addition to hundreds of hours of staff time to organize and plan the camp. The camp is an on-going initiative to be continued again next year. Partners include: U.S. Forest Service U.S. Army Corps of Engineers, Natural Resources Conservation Service Missouri Department of Conservation, Missouri Department of Natural Resources, Lincoln University and University of Missouri.

7/16/99

Agassiz National Wildlife Refuge Nesting Grebes Make News

Agassiz National Wildlife Refuge

Brad Dokken, a writer for the "Grand Forks Herald," and Chuck Kimmerle, a photographer for the paper, spent a day in the marsh at Agassiz National Wildlife Refuge with Dr. Bruce Eichhorst, assistant professor at the University of North Dakota. Eichhorst has been studying nesting grebes on the Refuge. The Refuge visit resulted in front page coverage in the Sunday, July 18, 1999 issue of the "Grand Forks Herald" and color photo layout in the paper's Outdoor Section. 7/18/99

Upper Mississippi Refuges Coordinate Law Enforcement Programs

Upper Mississippi River NW&FR

Refuge headquarters staff completed a series of coordination meetings with county sheriffs from Minnesota and Wisconsin that cover the Winona District and Trempealeau NWR..Refuge staff provided background information regarding the Service's Refuge law enforcement program, discussed interagency coordination and interagency cooperation. Radio communication agreements were executed or updated that will provide Refuge officers direct communications with area law enforcement centers. Partners include: Buffalo County Sheriff's Office, Alma Wis., Trempealeau County Sheriff's Office, Whitehall, Wis.,

Continued next page.

Wabasha County Sheriff's Office, Wabasha, Minn., Winona County Sheriff's Office, Winona, Minn. 7/19/99

First Endangered Piping Plover Found on Minnesota Refuge

Hamden Slough National Wildlife Refuge

An endangered piping plover, the first seen in Minnesota's Becker County, was observed on Hamden Slough NWR July 19, 1999. The plover was seen by a member of the Lakes Area Birding Club and was widely reported to fellow Minnesota birders. The plover was observed just east of the Refuge office, on Homstad Lake which is in drawdown. 7/19/99

Russians Visit Hamden Slough NWR

Hamden Slough National Wildlife Refuge

Six Russian students and their adult leader visited Hamden Slough and Tamarac NWR to view vegetative Ecosystems, the transition zones between them, and the different management styles used within each system. The students viewed the prairie ecosystem, Hamden Slough and the adjacent transition zone to broadleaf forest. At Tamarac the students viewed the transition zone from broadleaf to Great Lakes Pineland. The students were also interested in the differing management techniques between prairie wetlands and mixed forest. 7/20/99

DeSoto Refuge Float Wins First Place in Local Parade

DeSoto National Wildlife Refuge

The first ever DeSoto NWR float debuted in the Harrison County parade, winning first place in its division. The design and construction of the float was a cooperative effort by many of DeSoto's permanent and summer staff - all during off hours. The 28-foot featured a row boat "floating" on DeSoto Lake with duck decoys and paper fish. The float's land mass was constructed of native vegetation and more decoys. Three volunteers rode atop the float; two were in the boat "fishing," the third was "birding" on shore. The volunteers tossed 15 pounds of candy to kids along the one mile parade route, free-day passes were popular with the adults. 7/24/99

Mingo Refuge Biologist Develops New Duck Trap

Mingo National Wildlife Refuge

Charlie Shaiffer, a biologist at Mingo NWR, has developed a new, innovative process to catch and band adult wood ducks. Shaiffer constructed a traditional wood duck box with an additional bottom compartment. The bottom of the box contains a balanced trap door. When a wood duck lands in the box, it hits the trap door which sends it to the hidden compartment below. As the duck falls, another door temporarily swings into place to prevent other ducks from escaping. The ducks are not harmed and can easily be caught, banded, and released. The traps require daily observation, how-

ever, during the early breeding season. Two traps were constructed on Mingo in the spring of 1999, and were responsible for capturing 170 adult birds, which were all banded and released. The Refuge plans to adopt the new technology for long-term use in its banding efforts. 7/26/99

National Soil Team Checks Soil in Bisson Lake

Hamden Slough National Wildlife Refuge

Twenty-eight soil scientists from the United States and Canada spent three days on Hamden Slough NWR in late July 1999 to check, collect and analyze soils in Bisson Lake. The scientists reviewed soil characteristics as they changed from uplands to wetlands. The team included scientists G. Wade Hurt, Chairman, National Technical Committee for Hydric Soils, Warren Lynn, National Soil Lab, and Bob Eilers, Manitoba Land Resource Unit. The team became interested in the extensive analysis conducted in Bisson Lake by North Dakota State University. A 200-foot trench was dug 6 feet deep to check soil strata and ground water seepage. 7/29/99

Necedah NWR Staffs Booth at Fair

Necedah National Wildlife Refuge

The Service message reached well over 1,000 people through a Refuge display at the Monroe County Fair in Tomah, Wis., July 7-11, 1999. Over the five-day fair, Refuge staff talked with more than 500 people and an additional 150 names were added to the Refuge mailing

list. Radio interviews were conducted by local radio station. The booth was staffed from noon to 10 p.m. daily. 7/30/99

Detroit Lakes Wetland Management District Restores 700 Acres to Prairie Grassland

Detroit Lakes Wetland Management District

Seven hundred acres of former cropland was restored to native prairie grassland on 13 Waterfowl Production Areas (WPA) and the Rydell National Wildlife Refuge by the Detroit Lakes Wetland Management District during Fiscal Year 1999. Most of the seed was harvested from local WPAs and processed at the District's seed processing facility. Some of the forb (wildflower) seed was purchased with funds that were donated by the Becker County, Minn., Sportsman's Club. Twenty-eight acres were seeded by broadcasting the seed on snow-covered areas during the winter months. An estimated 275 ducks will be produced on these acres each year and numerous other resident and migratory wildlife species will benefit from this habitat annually. The Becker County Sportsmans Club and 13 local farmers partnered in the effort. 7/30/99

Over 300 Canada Geese Banded Through Partnership Necedah National Wildlife Refuge

Trempealeau National Wildlife Refuge, in Partnership with the Wisconsin Department of Natural Resources and others, banded 313 Canada geese; 42 of these were also neck

banded. Twenty nine volunteers contributed 174 hours toward this effort. On July 1, 1999, fifty persons gathered at Trempealeau NWR to band over 300 geese after herding them into a pen with a flotilla of seventeen canoes. Forty two of the geese were also neck banded. Wisconsin DNR organized the banding operation while Trempealeau NWR gathered volunteers to help with the process. In addition to Service and DNR staff, Wisconsin Conservation Corps, Minnesota Conservation Corps, the Private Industry Council work crew, and Wisconsin Waterfowl Association participated. 7/30/99

New Method Used to Complete Native Grass Seeding

Windom Wetland Management District

Ducks Unlimited provided funding for one large project which was matched by NAWCA to provide funds for grass/forb seeds. A total of 442 acres were recently planted to native grass/forbs to complete the Windom Wetland Management District's 1999 seeding Program. A new planting method was used on 360 acres. A Vicon broadcast seeder, was mounted to the front of a tractor which also pulled a cultipacker to incorporate the seed. This system allows one-pass seeding and reduced seeding time by approximately 50 percent compared to using Truax native grass seed drills. Partners include Ducks Unlimited 7/30/99

Southernmost Illinois Delta Empowerment Zone

Cypress Creek National Wildlife Refuge

Refuge staff and local community members were invited guests for a celebration of the Southernmost Illinois Delta Empowerment Zone (SIDEZ). SIDEZ is a grassroots opportunity for citizens, agencies and organizations to work together to improve communities and quality of life within a three county area of the Cache River Watershed. Johnson, Alexander, and Pulaski counties were designated one of four Empowerment Zones in the country. During the celebration, county representatives highlighted seven goals for rural development (community pride, community development, education, health care, tourism, infrastructure and economic development) and elected officials signed a Memorandum of Agreement for a Rural Development Empowerment Grant. Refuge staff are working closely with county representatives and citizens to bring about positive change in an economically depressed area. Partners include: Southern 5 Planning, Illinois Department of Natural Resources, and Alexander/Pulaski/Johnson County Commission. 7/30/99

Refuge Officers Conduct Holiday Law Enforcement

Upper Mississippi River National Wildlifer & Fish Refuge- McGregor District
One hundred miles of Refuge habitat protected by law enforcement patrols on the

busiest public use weekend of the year. Three refuge officers from the McGregor District and one from the Winona headquarters office of the Upper Mississippi River National Wildlife and Fish Refuge patrolled the main channel of the Mississippi River July 3-4, 1999. Violations encountered were possession and discharge of fireworks, underage possession of alcohol, and boating violations. The weather was extremely hot and this holiday weekend was the busiest in terms of public use ever seen on the Refuge. The majority of users were families out enjoying the weekend. 7/30/99

U.S. Naval Reserves Volunteer Weekend at Mingo NWR

Mingo National Wildlife Refuge
A Naval Mobile Construction Battalion (NMCB #28) from Cape Girardeau, Missouri spent their weekend drill at Mingo NWR July 9-11, 1999. The unit, consisting of 42 Navy Sea Bees, donated 1,176 volunteer hours to the Refuge performing construction and maintenance projects. Projects included the construction of a large concrete box culvert, many of the refuge roads were graded, safety guard rails were constructed on a bridge, several fields were disked or mowed, gravel was hauled and spread around many of the public use areas, and dozer work on levee repair. The Sea Bees brought their own heavy equipment to complement existing refuge equipment. The project was organized by Doug Siler, Heavy Equipment Operator and Rod Hansen, Assistant Refuge Manager. 7/30/99

Mingo NWR Utilizes Summer Youth Training Program

Mingo National Wildlife Refuge

Mingo National Wildlife Refuge is utilizing a Missouri program to provide work experience to youth while providing a valuable service at essentially no cost to the refuge. The Southeast Missouri Private Industry Council sponsors the "Job Training Partnership Act" (JTPA) which provides funding to employ students enrolled in upper high school levels to perform community service at some local governmental entity. Mingo was chosen as a work site for two students. The students perform basic maintenance including painting, trash pickup, weed control, etc. on the refuge for a 40 hour/week tour during summer months. Mingo NWR provides \$100/month to pay some administrative costs. 7/30/99

Secretive Marsh Birds Study Completed at Sherburne National Wildlife Refuge

Sherburne National Wildlife Refuge

A study to monitor breeding populations of secretive wetland birds on the Sherburne National Wildlife Refuge was conducted in Fiscal Year 1999 following the preliminary national protocol (USFWS, 1999). Two species studied, the American and least bittern, are on the Service's list of Migratory Nongame Birds of Management Concern. Because of their secretive nature, these birds are not monitored by any waterbird survey used on the Refuge. The study was designed to determine the best

times and methods to monitor these birds on the Refuge. The information from this study will be used to establish an annual survey that will provide a knowledge base to help the Refuge more accurately incorporate these birds into the management decisions and help monitor the impacts of management activities on these nongame bird populations. St. Cloud State University assisted with the study. 8/6/99

Detroit Lakes District Manager Interviewed on Radio and Television

Detroit Lakes Wetland Management District

On August 12, 1999, Detroit Lakes Wetland Management District Manager Rick Julian was interviewed by KDLM Radio Reporter Dan Ochsner about the Waterfowl Expo activities scheduled for August 28. Manager Julian was also interviewed about the Waterfowl Expo for a program on the local cable station (TV 3) that same day. The media interviews provided additional exposure for the District, and publicity for Service programs. 8/12/99

Outreach: Detroit Lakes District Staff Reach 15,000 at Becker County Fair

Detroit Lakes Wetland Management District

Volunteers and staff from the Detroit Lakes Wetland Management District manned an information booth at the Becker County Fair's Natural Resources Building August 11-14, 1999. Visitors learned about Service, the Wetland Management District, opportunities for wetland and upland resto-

rations, volunteering, wildlife and other natural resources topics. An estimated 15,000 people visited the fair's Natural Resources Building during the four-day event. 8/14/99

450 Learn About Threatened Michigan Loons at Seney NWR's 'Love a Loon Day'

Seney NWR

Approximately 450 visitors participated in Seney NWR's "Love a Loon Day" August 14, 1999. The event helps focus the public's attention on the common loon, a threatened species in Michigan. Love a Loon Day emphasizes the loon's special characteristics and threats to its survival. Visitors received a passport when upon arrival and acquire stamps as they visited exhibits, a puppet show, a loon calling contest, games and crafts stations. Visitors who completed their passports received a button reading "Love a Loon Day 1999 - Seney National Wildlife Refuge". Refreshments were provided by the Seney Natural History Association. Partners include: Seney Natural History Association, Michigan Loon Preservation Association. 8/14/99

Fiscal Year 1999 Field Summary- Agassiz National Wildlife Refuge Grebe Study

Agassiz National Wildlife Refuge

A study of grebes on Agassiz NWR was conducted under a cooperative agreement with Dr. Bruce Eichhorst, University of North Dakota during Fiscal Year 1999. Seven dummy eggs with data loggers were placed in the nests of two pied-billed grebe and five red-necked grebe where incubation time and

temperature, time on nest and periods of absence were monitored. Ten radios and a receiver/antenna were purchased to monitor bird movement for nesting sites as a result of drawdowns. Only three red-necked grebes were radioed by implant because of wet weather and the end of nesting by the time the radios were available for the study. Samples collected and sent off for analysis include: Pied-billed grebe (seven eggs; feathers from 12 juveniles); eared grebe (13 eggs; feathers from 24 adults and 11 juveniles); red necked grebe (16 eggs/ feathers from six adults and 13 juveniles). 8/15/99

Partnership Efforts Lead to Cleanup of Abandoned Oil Wells

Patoka River National Wildlife Refuge

Patoka River National Wildlife Refuge signed a cooperative agreement with the Indiana DNR-Division of Oil and Gas to remove pump jacks from nine abandoned oil wells in Indiana, two of which are on the Patoka River National Wildlife Refuge. Black Beauty Coal Company constructed a temporary road access and paid \$7,000 for a contractor to remove four 8,000-gallon rusting oil tanks that developed a leak. The Indiana DNR contracted for \$55,000 and supervised the well closures and later removed the temporary access road on private property. Partners in the effort included: Indiana Department of Natural Resources-Division of Oil and Gas, Patoka South Fork Watershed Steering Committee, Black Beauty Coal Company and private land owners. 8/16/99

Detroit Lakes District Enters Boundaries in Geographic Information System

Detroit Lakes Wetland Management District

The Detroit Lakes Wetland Management District, with the help of a dedicated volunteer, began digitizing District Waterfowl Production Areas into the Geographic Information System (GIS) during Fiscal Year 1999. Volunteer Aimee Schmidt spent most of the summer digitizing WPA boundaries on the new GIS computer. She completed 80 of the 162 District WPAs. After all of the WPA boundaries are entered on the system, management activities and vegetative mapping will be used for record keeping and field operations. 8/27/99

175 Learn About Service Programs And Hunting Techniques at Waterfowl Expo

Detroit Lakes Wetland Management District

The Detroit Lakes Wetland Management District hosted its second annual Waterfowl Expo Aug. 28, 1999, at Detroit Lakes, Minn. Approximately 175 visitors participated in activities such as duck calling, shotgun patterning, waterfowl identification, retriever demonstrations, duck and goose decoy placement, range estimation, decoy carving, and face painting. Duck Stamps were on sale and drawings were held for door prizes. Antique decoys were also on display. Dennis Hunt, professional goose hunter, author, and speaker, presented a seminar on goose hunting techniques. The Expo was made possible through the efforts of 25

volunteers who set up and staffed most of the information booths. Twenty local businesses donated door prizes to help make the Expo a success. 8/28/99

Service Provides Waterfowl Identification Tips at Cabella's Fall Expo

Refuges & Wildlife

Members of Region 3 staffed a Service display and answered visitors' questions about waterfowl identification and hunting during the two-day Fall Expo August 28-29 1999, at Cabella's Outdoor Sports Store in Owatonna, Minn. The theme for Service display was waterfowl identification and waterfowl hunting. Region staff from Federal Aid, External Affairs and Refuges and Wildlife represented the Service at the Expo, which was staffed by other government, non-government organizations as well as commercial outdoor equipment vendors. The Service display featured a slide show on duck identification as well as several mounted ducks (Ducks on a Stick) used to help visitors test their identification skills. Posters, brochures and Information on Service programs employees were distributed to hundreds of people attending the Expo. 8/29/99

Agassiz National Wildlife Refuge Entrance Signs Get New Look

Agassiz National Wildlife Refuge

Boy Scout Jason Swenson, Thief River Falls, Minnesota completed his Eagle Scout project at Agassiz National Wildlife Refuge on August 30,

1999. Eight new signs (seven 4'x 4' signs and one 4'x 8' sign) were created. Soil four inches deep had to be removed from around the sign in a hexagon shape. Filter fabric was placed in the removed soil area and small rocks were placed on top of the filter fabric. The addition of rocks and fabric to the signs has added landscape beauty and prevents vegetation from growing around the the signs, which inform the public that they are entering a national wildlife refuge. The signs are located at refuge corners and along Marshall County Road 7, the main road past the refuge office. 8/30/99

Species of Concern: Common Terns Nesting Monitored at Ottawa NWR

Ottawa National Wildlife Refuge

Common terns are a species of concern in Region 3 due to birds' declining numbers throughout the region. Two platforms are placed each year in the Crane Creek estuary on Ottawa National Wildlife Refuge where common tern nesting and fledge successes are monitored by the refuge biologist, volunteers and Ohio Division of Wildlife staff. Forty pairs of terns produced 61 nests and 47 young successfully fledged from the two platforms in 1999. All young were banded with Service leg bands. The five-year average for the nest platforms is 27 pair of terns producing 39 nests with 20 successfully fledged young. 9/1/99

Green Point Learning Center Offers Edible Plant Walk Program

Shiawassee National Wildlife Refuge

Green Point Environmental Learning Center, part of the Shiawassee NWR, hosted its First Wednesday Discovery Series program Sept. 1, 1999. Thirty-five people attended this month's program: Edible Plant Walk. Park Ranger Marc Beaudin discussed the ethics, benefits, and precautions of collecting and eating wild edible plants. He led the group on a short walk to identify and learn about various plants. Examples of edibles such as spearmint tea, sumac juice, cattail bread, and clover fritters were available for people to sample. The fritters were prepared during the program with the help of the participants. 9/1/99

Open House Tours Show-Off Shiawassee NWR

Shiawassee NWR

Shiawassee NWR held its annual Open House Sept. 11-12, 1999. From dawn to dusk the entire weekend the entire refuge was open to hiking and biking beyond the Closed Area signs on the Refuge. On Saturday, September 11, a record number of people participated in the seven-mile, self-guided auto tour through the heart of the Refuge. Nine hundred forty people in 387 vehicles toured the refuge, while others hiked and biked throughout the Refuge. On Sunday, the Friends of the Shiawassee NWR held a Bike-a-Thon. Participants rode their choice of a one-, four- or eight-mile loop through the refuge with pledges collected for

distances biked. A total of \$1400 was raised by the Friends group through the sale of food, beverages, shirts, and pledges collected. Partners include: Friends of the Shiawassee National Wildlife Refuge and Refuge volunteers. 9/11/99

Green River ELC Partners With Environmental Groups For Environmental Fair
Shiawassee National Wildlife Refuge

Green Point Environmental Learning Center, part of the Shiawassee NWR, hosted its first-ever Educator's Environmental Fair Sept. 9, 1999. Organizations participating in the three-hour fair included: Bay City State Recreation Area; Michigan United Conservation Clubs; Organization for Bat Conservation; Boy Scouts of America-Lake Huron Area Council; Girl Scouts-Mitten Bay Council; Saginaw County Convention and Visitors Bureau; Chippewa Nature Center; Hall of Ideas, Michigan Department of Natural Resources-Natural Heritage Program and Project WILD. More than 150 invitations were sent out to schools. Scout leaders parents who home school church groups and other youth organizations. Twelve people showed up for the Fair. Green Point staff plan on hosting the Fair again next year perhaps a week or two later in hopes of attracting more participants. Partners include: Bay City State Recreation Area, Michigan United Conservation Clubs, Organization for Bat Conservation, Boy Scouts of America-Lake Huron Area

Council, Girl Scouts-Mitten Bay Council, Saginaw County Convention and Visitors Bureau, Chippewa Nature Center, Hall of Ideas, Michigan Department of Natural Resources-Natural Heritage Program, Project WILD. 9/9/99

Engineering Students and Waterfowl Association Help Improve Wetland Habitat
Crab Orchard National Wildlife Refuge

A shallow-water impoundment on the east side of Crab Orchard National Wildlife Refuge was recently renovated to a high quality wetland habitat with help from engineering students at Southern Illinois University-Carbondale, and members of the Crab Orchard Waterfowl Association. A leaking pond dam, constructed in the 1960s for waterfowl and watering cattle, was repaired, raised and lengthened. The surface area of the impoundment was doubled, increasing high quality wetland habitat for waterfowl, shorebirds, wading birds, and other wildlife. Engineering students, led by Roy R. Frank, assistant professor in the university's Department of Technology, created a contour map of the area, designed the re-constructed dam and spillway, and placed grade/fill stakes at the project site. Refuge staff used equipment to clear brush and moved earth to repair, raise, and lengthen the original dam. Members of the Crab Orchard Waterfowl Association provided grass seed, fertilizer, straw mulch, tractors with implements, along with their time and labor to re-establish grass

vegetation on the disturbed areas. The final product is an improved wetland habitat which will not only provide important feeding, loafing, and breeding habitat to migratory birds, but critical life components for a variety of aquatic and terrestrial wildlife species as well. Partners include: Senior Design Class, Dept. of Technology, SIU-C, Crab Orchard Waterfowl Association. 9/14/99

Jackpining Seedlings Promote Kirtland's Warbler Management at Seney NWR
Seney National Wildlife Refuge

A variety of accomplishments were completed for Kirtland's warblers on Service owned lands. A total of 280 acres of jack pine were sold for harvesting in three timber sales. Two tracts totalling 250 acres previously cut were regenerated by planting. A direct jack pine seeder was purchased and will be used by the Michigan Department of Natural Resources to direct seed Service lands. The Refuge purchased 525,000 jackpine seedlings for planting in September. In addition to regeneration activities refuge staff participated in the annual census of singing males, recovery team meetings, cowbird trap building, acquisition of additional tracts and banding. Partners include: U.S. Forest Service, Michigan Department of Natural Resources. 9/14/99

Partnerships Work to Restore Fish and Wildlife to Augusta Lake

Patoka River National Wildlife Refuge

With a \$10,000 grant from the Clean Water Action Plan, the Patoka River National Wildlife Refuge signed a cooperative agreement with Indiana Department of Natural Resources-Division of Reclamation, to excavate pits and trenches in the abandoned mine spoils around the 55-acre Augusta Lake. The excavation is based on the reclamation expertise of Jack Nawrot from the Southern Illinois University Wildlife Research Department. The pits were filled with calcium hydroxide, a highly alkaline by-product of acetylene gas production to infiltrate and neutralize the pyritic acid producing sandstone around the lake. Partners include: Patoka South Fork Watershed Steering Committee, IDNR-Division of Reclamation, IDNR-Division of Fish and Wildlife, Office of Surface Mining, Southern Illinois University - Coop Wildlife Research Lab, Four Rivers RC&D, Boy Scouts and Girl Scouts. 9/15/99

Partners for Fish and Wildlife Program Restores 193 Acres of Wetlands in Southern Michigan

Ottawa National Wildlife Refuge
Thirty-six wetland sites were restored in southern Michigan though the Partners for Fish and Wildlife Program. The wetlands, totaling 193 acres, were restored in Hillsdale and Lenawee counties. The Hillsdale county wetland restorations were completed by Private Lands Biologist

Steve Dushane and Equipment Operator Dale Hall using equipment from the Ottawa National Wildlife Refuge. The wetland restorations in Lenawee County were completed through a cooperative agreement with the Lenawee County Soil and Water Conservation District. The wetlands were restored in partnership with the Lenawee County chapter of Pheasants Forever, the Natural Resources Conservation Service and the Lenawee and Hillsdale County Soil and Water Districts. A portion of the funding for the projects was from a North American Wetlands Conservation Act grant. Partners include: Pheasants Forever, Natural Resources Conservation Service, Lenawee Soil and Water Conservation District. 9/15/99

Seney Refuge Examines Invasive Plant Control

Seney National Wildlife Refuge

An invasive plant status assessment conducted in August 1999 identified several exotic plants that are rapidly spreading through Seney NWR and from the Refuge to adjacent state and private lands. The assessment determined purple loosestrife, glossy buckthorn, spotted knapweed, and reed canarygrass to be the major threats. Glossy buckthorn is the number one concern as it is rapidly spreading away from the headquarters area, outcompeting native vegetation. A Refuge Operating Needs System (RONS) proposal was developed for control. Control action will begin in 2000 and focus on buckthorn

cutting and treatment of the stumps with herbicide. 9/15/99

Butterfly Collection Illustrates Species Diversity on Ottawa National Wildlife Refuge

Ottawa National Wildlife Refuge

Staff and volunteers at Ottawa National Wildlife Refuge began a butterfly and dragonfly collection during the summer of 1999. William Dailey, a local volunteer, logged more than 300 hours collecting 34 species of butterfly, two species of moth and 11 species of dragonfly. The specimens are preserved in collection boxes and used to create a refuge lepidopteran and odonate species lists as well as to provide voucher specimens. The collection is also used as part of an educational display at Ottawa NWR that attracts the attention of visiting public. The collection increases the awareness of the diversity of wildlife species on the refuge and provides additional information to staff and management necessary for informed decision making. Partners include: Ohio Lepidopterist Society (training materials). 9/15/99

DL Wetland Management District Helps 4th Graders Learn About Native Prairie

Detroit Lakes Wetland Management District

The Detroit Lakes Wetland Management District is working with the Detroit Lakes School System and several fourth grade teachers to establish native grass and forb plantings on school properties to be used as instructional areas for

fourth graders. The students will learn about prairie soils, native prairie plants, and wildlife. Each year, fourth grade students will be involved in planting a small area of the school yard to native forbs and grasses. On Sept. 16, 1999, 100 Detroit Lakes fourth graders made a field trip to the Flickertail and Bay Lake WPAs to watch the combines harvest native prairie seed and do some hand collecting of seed so they could run germination tests. 9/16/99

NAWCA Grants Bring More Than \$3.3 Million to Region 3 Partners

Refuges & Wildlife

The Migratory Bird Conservation Commission approved four North American Wetlands Conservation Act (NAWCA) grants to Region 3 partners for a total of \$3,339,980. The grants, approved Sept. 15, 1999, will be applied to four projects. The Cache River Wetlands III project will allow the Illinois Chapter of The Nature Conservancy to acquire a key parcel in the Cache River basin of southern Illinois, critical for a future re-connection of the Upper and Lower Cache Rivers. The Missouri Four Rivers Wetland III project will allow the Missouri Department of Conservation to expand protected acreage in the floodplains of the Marmaton, Little Osage, Marais des Cygnes and Osage Rivers, which will be restored to bottomland forest and a diversity of other wetland habitats. The Northcentral Iowa Wetland Project will allow the Iowa Department of Natural Resources and other

partners to maximize the effectiveness of the Emergency Wetland Reserve Program in a five-county area. Lastly, the Michigan Upper Peninsula Coastal Wetland project will benefit a multitude of partners by protecting and restoring coastal wetlands and associated uplands in the Lake Superior and St. Mary's River watersheds of Michigan. Partners include: Iowa Department of Natural Resources, Illinois Chapter of The Nature Conservancy, Ducks Unlimited, Missouri Department of Conservation, Natural Resource Conservation Service, Michigan Department of Natural Resources, Anheuser-Busch, Inc., Great Lakes Indian Fish and Wildlife Commission, U.S. Forest Service, Worth County Conservation Board, Pheasants Forever, Keweenaw Bay Indian Community, Bay Mills Indian Community, Village of L'Anse. 9/15/99

Detroit Lakes District Partners With High School to "Make a Difference"

Detroit Lakes Wetland Management District

Three students at Detroit Lakes High School were introduced to natural resource careers during their semester-long work experience at Detroit Lakes Wetland Management District in Detroit Lakes, Minn. The students worked at the District office five hours a week for one school semester as part of the school's "Make a Difference" program. The students gained a feel for conservation work while learning about educational requirements of Service employees. 9/15/99

Seney Refuge Staff Rehabilitates Eroding Dike at M-2 Pool

Seney National Wildlife Refuge

Seney's largest impoundment, the 863-acre M-2 Pool, received a major facelift in September 1999 when 2.1 miles of eroded dike were repaired. Many sections of the dike had eroded to the point of threatening the road on top of the dike and the integrity of the facility. The entire 2.1 miles were rebuilt and sloped with the Refuge excavator and bulldozer. Hundreds of trees that grew along the dike were removed. About one-half mile of rip-rap and one and a half miles of tree revetments were installed to protect the dikes from erosion from wave action. All slopes were fertilized and seeded to stabilize exposed soils. The entire project was completed by Refuge staff. 9/15/99

100 Volunteers Help Band Ducks at Agassiz National Wildlife Refuge

Agassiz National Wildlife Refuge

One-hundred student volunteers participated in a public duck banding session at Agassiz National Wildlife Refuge Sept. 16, 1999. Twenty participants were students at the University of Minnesota-Crookston, Crookston, Minn., and eight participants were students at Perham High School, Perham, Minn. Other participants were individuals from surrounding communities. Nearly all participants took part in the banding the operation. One-hundred and thirty-nine mallards, 38 pintails and six blue-winged teal were captured and banded. 9/16/99

Detroit Lakes Wetland Management District Manager Interviewed by WDAY TV

Detroit Lakes Wetland Management District

Chad Koel, WDAY TV-6 Fargo, interviewed Wetland Manager Rick Julian at the Detroit Lakes Wetland District office Sept. 21, 1999, for a program on the fall waterfowl flight forecast, waterfowl population trends, and the activities at the Detroit Lakes Wetland Management District in wetland restoration, upland restoration and educational programs. 9/21/99

Detroit Lakes District Participates in Private Grazing Seminar

Detroit Lakes Wetland Management District

In cooperation with the UNatural Resources Conservation Service (NRCS), Wildlife Biologist John Gunderson participated in a Range Management/Grazing Workshop on September 22-23, 1999, for NRCS personnel who had limited training or exposure to grazing plans and grazing practices. Biologist Gunderson spoke to the group about the Private Lands Grazing Program that was started on the Detroit Lakes Wetland Management District in 1996. This program, which is similar to the Fish and Wildlife Service and Duck Unlimited private lands grazing programs in North and South Dakota, furnishes all of the necessary fencing materials for pasture systems with three or more paddocks if the landowner will follow a grazing management plan for a minimum of 10 years. 9/23/99

Necedah Area Recommended for Whooper Reintroduction

Necedah National Wildlife Refuge

On Sept. 24, 1999, the Whooping Crane Recovery team announced its decision to move forward with the release on endangered whooping cranes in central Wisconsin. Necedah National Wildlife Refuge and the adjoining state managed federal properties known as the Meadow Valley Wildlife Area and the Sandhill Wildlife Area comprise the release areas in central Wisconsin. Sandhill chicks will be raised in the summer of 2000 as a pilot program that includes additional suitability studies to prepare for the release of the whoopers in 2001. In addition to the sites in central Wisconsin, Horicon Marsh and Crex Meadows Refuges are being considered as possible release locations. Partners include: Wisconsin Dept of Natural Resources, International Crane Foundation, Whooping Crane Recovery Team, local businesses and organizations. 9/24/99

News Reporter Assists with Banding At Necedah National Wildlife Refuge

Necedah National Wildlife Refuge

Wasau Daily Herald reporter Jim Lee assisted refuge volunteers and professional staff with the refuge's waterfowl banding program Sept. 24, 1999. Mr. Lee participated in the hands-on banding as part of his research for an upcoming newspaper article. 9/24/99

Outdoor Ethics Focus of Seney Refuge's National Hunting and Fishing Day

Seney National Wildlife Refuge

Interpretive Specialist McDonough organized this year's celebration of National Hunting and Fishing Day at Seney NWR. More than 300 visitors, including Boy and Girl Scouts from local middle and high schools, participated in the annual event, which promotes ethical outdoor sportsmanship. The event featured displays of the nation's Junior Duckstamp winning artwork, decoy carvers, an archery range, and fly tying demonstrations. Boy and Girl Scouts in Middle and High School were invited to attend to take part in wood duck and bluebird nest box building and placement, a Leave No Trace workshop, and decoy carving workshops. Partners include: Seney Natural History Association, Hiawathaland Boy Scout Council, Peninsula Waters Girl Scout Council and local area artisans. 9/25/99

Refuge Staff Host Waterfowl Expo at Agassiz National Wildlife Refuge

Agassiz National Wildlife Refuge

Refuge staff hosted Waterfowl Expo Sunday, September 26, 1999, at Agassiz National Wildlife Refuge. About 30 people attended the Expo, which included a waterfowl identification slide show; use of Federal Aid's Simulated Action Firearm Education Training (S.A.F.E.T.Y.); dog training and retrieving; water decoy placement and calling and blind and

the showing of the Service's 20-minute video, "Status of Waterfowl." Six wildlife art prints were awarded by drawing to visitors attending the event.
9/26/99

Muscatatuck National Wildlife Refuge Non-Game Point Count
Muscatatuck National Wildlife Refuge

Data from the 1999 Non-Game Breeding Bird Survey was analyzed. Sixty non-game bird species were reported, including several Region 3 Priority Species. The project will provide information useful in management activities on the refuge.
9/30/99

Ottawa Refuge Staff Partners For Prairie Restorations in Ohio Counties

Ottawa National Wildlife Refuge
The Erie-Ottawa-Sandusky Pheasants Forever, in cooperation with Ottawa NWR and private landowners, planted 235 acres of native prairie on private lands. The project restored waterfowl nesting habitat and winter habitat for game/non-game birds. Pheasants Forever and private cooperators contributed time, labor and equipment. Ottawa NWR provided funding through the Challenge Cost Share. In Erie County Ohio, 123 acres of native prairie were planted to restore waterfowl nesting habitat and winter cover for game/non-game birds. Erie-Ottawa-Sandusky Pheasants Forever and private landowners contributed time and equipment. Ottawa NWR assisted by providing funding through the Challenge Cost Share program. Partners include: Erie-Ottawa-Sandusky Pheasants Forever and private landowners 9/27/99.

Crane Creek Temporal Fish Monitoring

Ottawa National Wildlife Refuge

Crane Creek is an estuary located on Ottawa National Wildlife Refuge in Ohio. The creek is one of the few wetland areas which remain connected with western Lake Erie. Fishery Biologist Wells is continuing an ongoing temporal fish monitoring program of the creek. The purpose of the program is to identify the use of the wetlands by various fish communities and to determine the effects of nursery and habitat losses to the fish communities. Monitoring of the Crane Creek occurs on a monthly basis starting in April and continuing through until October. A series of five trapnets are set over night and night larval sampling and seining are also conducted in order to identify young of the year and larval fish. Unfortunately, due to low lake levels, the last full scale sampling of Crane Creek concluded in August. Partners include: Ottawa National Wildlife Refuge Association, Ohio State University, USGS Great Lakes Science Center. 9/27/99

Aquatic Species Inventory Surveys Lake Erie's Coastal Wetlands

Ottawa National Wildlife Refuge

The Ottawa National Wildlife Refuge Complex holds some of the few remaining coastal wetlands along Lake Erie. These wetlands provide important habitats for migrating birds, fish, mussels, plant communities, and is a source of nutrient exchange for Lake Erie. In an attempt to quantify the aquatic species within the refuge,

Biologist Wells implemented an assessment survey of the aquatic communities. The surveys consisted of a fish species inventory list, water quality parameters, and aquatic vegetation surveys. Sampling occurred on a regular basis starting in April and ending in September. The purpose of the surveys on the Ottawa Complex is to provide a species and water quality profile which can be implemented into a water management regime. Water level management programs are constructed yearly in order to promote desirable habitat for a diverse number of species. The goal of the fish and aquatic habitat survey is to encourage aquatic organisms into the refuge's management plan. Partners include: Ottawa National Wildlife Refuge Association and University of Toledo. 9/28/99

Drawdown of Horicon Refuge's Main Pool Helps Control Carp

Horicon National Wildlife Refuge

Staff at Horicon National Wildlife Refuge have partnered with other agencies, including the Wisconsin Department of Natural Resources and private groups to form a Marsh Management Committee dedicated to the long-term benefit of Horicon marsh and surrounding area. A drawdown of the 32,000 acre Horicon Marsh was initiated last year as part of this effort. Unfortunately heavy rains from April through July prevented desired vegetation like bulrushes to grow. However, plans call for contin-

ued draw down of the marsh as lower water levels will aid the carp control project scheduled for this winter. The long-term goal is improved habitat for waterfowl and other marsh wildlife. Partners include: Wisconsin Department of Natural Resources, U.S. Fish and Wildlife Service LaCrosse Fisheries Office, Lake Sinissippi Association, numerous private individuals with an interest in the marsh. 9/28/99

Metzger Marsh Fish Passage-way

Ottawa National Wildlife Refuge
Metzger Marsh, 560 acre wetland in northwest Ohio, is the site of an experimental fish passage structure. Metzger Marsh was closed to Lake Erie by diking activities in 1994 in order to prevent further destructive effects from the lake. The structure was added to allow fish movement between Lake Erie and the marsh. Less than 10 percent of Lake Erie's original wetlands remain and many of the remaining wetlands retain no connectivity with the lake. Conceptually, the passageway will provide access to spawning and nursery habitat to lake fish communities which would have otherwise been closed off. This will allow the marsh to retain some of its connectivity with the lake. If successful, this passageway could be used in other marsh habitats around the Great Lakes. The structure consists of two trap baskets which hold fish moving into and out of the marsh. The gates to the marsh were opened in March 1999. Biologist Wells initiated the fish sampling

program in spring of 1999. As of August 1999, approximately 41 species from 16 families have been identified as using the structure. Partners include: Ohio State University, Ohio Division of Wildlife, Ohio Division of Natural Resources, US Geological Survey Great Lakes Science Center, Ducks Unlimited. 9/28/99

Grassland Restoration Project Completed at MSC/JPG

Muscatatuck National Wildlife Refuge

Service staff at Muscatatuck National Wildlife Refuge/JPG conducted hand-clearing of newly established woody vegetation within a 200-acre area of Jefferson Proving Ground. The hand-clearing combined with the re-introduction of prescribed fire within an additional 7,500-acre area was needed to offset the loss of grasslands following the U.S. Army's cessation of their fire management program in 1994 and subsequent base closure in 1995. These efforts have allowed the current Henslow's sparrow population at Jefferson Proving Ground to remain at approximately 1,000 breeding pairs and benefitted numerous additional bird species that prefer grassland and early successional habitats. 9/30/99

Local Students Learn Bird Watching Skills at Seney NWR

Seney National Wildlife Refuge
Sixty eight students from Newberry Elementary students and two home school groups visited Seney NWR for field trips in September. Second graders learned to distinguish

between wildlife, pets and domesticated animals, and played games to review basic animal kingdom classification. They rounded out their day with a hike searching for wildlife signs. Third graders attended "Birds and Binocs" where they learned to distinguish between types of birds and how to use binoculars. A nature hike followed the indoor session to give them a chance to spot birds with their newfound skill and tools. Partners include: Seney Natural History Association provided the binoculars for use by school groups. 9/30/99

First Phase of Marsh Creek Watershed Restorations Completed at Seney NWR

Seney National Wildlife Refuge
In 1915, the Walsh Ditch was dug for an agricultural development that quickly failed. After 84 years, the ditch continues to drain wetlands for 16 miles through the center of Seney National Wildlife Refuge. As the Refuge staff became increasingly aware of the adverse impacts of the ditch, a plan was developed to restore the watershed. Phase I of the restoration was completed this year, with water flow restored to three miles of Marsh Creek below C-3 Pool. Researchers from U.S. Geological Survey's Biological Resources and Water Resources Divisions completed two years of research on the effects of Walsh Ditch on the wetlands of the watershed and on the water budget of the area. Phase II of the restoration begins next year and involves planning the restoration of stream flow in

an additional 13 miles of Marsh Creek, restoration of flow in three miles of Walsh Creek and four miles of Ducey Creek. 9/30/99

GIS Mapping of Agassiz National Wildlife Refuge Vegetative Layer Completed
Agassiz National Wildlife Refuge

In September, the U.S. Geological Survey's Environmental Management Technical Center completed a two-year GIS (Geographic Information System) project for Agassiz National Wildlife Refuge and surrounding area. The project maps the vegetative layer on computerized maps for the 61,000 acre Agassiz National Wildlife Refuge and 20,000 acres of surrounding Wildlife Management areas. The project began in August 1997, and includes 1997 aerial infra-red/color photos of the area for baseline data. The layer will greatly benefit the analysis of data collected on numerous wildlife research projects including analysis of radio collared moose, wolf, bittern and grebe movements, nesting and resting sites; assessing fire and water management impacts; and facility maintenance. 9/30/99

Fiscal Year 1999 Field Summary - Bittern Study at Agassiz & Big Stone Refuges
Agassiz National Wildlife Refuge

The Bittern Study at Agassiz National Wildlife Refuge is being conducted in three phases over seven years; two phases are complete, performed by Master Degree SCEP students. Phase III was

initiated in Fiscal Year 1999 and expanded to include Big Stone National Wildlife Refuge/prairie potholes. Study highlights for 1999 include:

Two of four adult bitterns satellite collared in fall 1998 returned to Minnesota. Six males and one female adult radio-tagged in 1998 returned to near the original capture sites (four at Agassiz, three at Red Lake) only one of these birds was recaptured and collared. 14 birds (12 males and two females) were radio-collared and another four adults were satellite collared in August. One satellite-collared bird began moving south Sept 30. In January, sites where satellite collared birds stopped during their fall migration or wintered in Florida and Louisiana were visited and vegetation documented. Many contacts were made for future monitoring. SCEP student Tammy Laney arrived April 30, 1999, to capture, collar and monitor birds on Agassiz NWR. She later transferred to Big Stone NWR for the prairie pothole component of study which included nest searches, inventoring wetlands, and contacting private landowners for access to the birds. Soch Lor, a Service employee and Ph.D candidate, arrived May 15 to begin Phase III, the studies final phase. Lor captured, collared and monitored birds; completed measuring nest site parameters for nine nests at Agassiz, and seven at the Red Lake Reservation. She also conducted random sampling to compare nest sites and surveyed 39 listening stations. Unusually wet condi-

tions throughout spring and summer caused erratic bird behavior presenting challenges to capturing birds; as a result efforts were focused on nesting parameters. Partners include: Dr. John Toepfer-Advisor, project designer and contributor, Minnesota Department of Natural Resources, Red Lake Band of Chippewa, Agassiz Audubon, University of Missouri-Columbia and Dr. Leigh Fredrickson. 9/30/99